WOMEN AND ENVIRONMENT

INSTRAW news

WOMEN AND DEVELOPMENT

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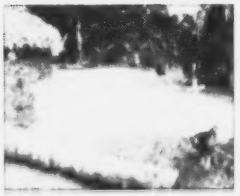

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Women and environment

EDITORIAL

This issue of ***INSTRAW News*** *draws on just four case studies of environmental action, in four different regions. They were commissioned by INSTRAW in 1991-1992 with the intention of demonstrating the variety of women's involvement in the environmental movement. The results show that diversity, but they also demonstrate some central commonalities that deserve reflection.*

The extent to which women have been consumers or rather victims of decisions affecting the environment is clear. It is equally obvious, as demonstrated by the Bangladesh case that having (women) friends in high places helps to get better decisions.

All of these cases, however, reflect actions that have been spurred by a long history of bad political and bureaucratic decisions from which women were excluded. It would be tragic if the message to come out of these case studies was only that.

Women must not be regarded, or allowed to see themselves, as a reserve force for putting things right when the damage has already been done. The message is clearly that we need to get things right more often, the first time around.

At a more profound level these studies illustrate very graphically the desperate need for more participatory forms of government at every level.

We need decision-making bodies and systems that not only take into account the needs of women but include women as equal actors.

Half of the world's intelligence and experience is held by women. Precisely because there has been gender differentiation (and discrimination) in the past, women's experience and knowledge is different from that of men. In a world of finite resources we cannot afford to squander, cast aside or suppress half the world's human resources on the basis of the shape of their skin.

This double issue of ***INSTRAW News*** *that is based on four case studies commissioned by INSTRAW is rather different from the usual style and content. We believe that the material that is brought together deserved a wider audience.*

SEMA Maranhão, Brazil

Long distances must be traversed to obtain fuel and watermelons.

WOMEN AND ENVIRONMENT

- BRAZIL
- BANGLADESH
- BURKINA FASO
- TAHITI

The shaping of a link between women and the environment raises a number of questions at the theoretical and analytical levels. Although in the early 60s, and 70s, feminist literature emphasized the historical and social processes of the construction of female identity, nowadays the environment paradigm raises new questions for feminists. If until recently most feminists rejected women's identification with nature, today the new environmental paradigm turns what was regarded as women's handicap into her wealth and her advantage, making women into the guardians and rescuers of the world and life.

In spite of the different positions that the debate on women and environment may take, there seems to be consensus that *quality of life* provides the basis of the linkage between the two. This linkage has been built around the struggle for a better livelihood, comprising the access to sanitation and proper housing, to health care and education, to the right to live in a healthy and balanced environment and in harmony with the demands and rhythms of life.[1]

It is thus mainly in the struggle against deterioration of their living conditions, and those of their families, that women have been playing a major role in the environmental issues. Being historically responsible for the articulation of the survival strategies of their families, women have always been very active in demanding improvements in their environment. However, it is important to point out that even if women, specially of low income level, have been the main agents in the struggle for a better quality of life, many of

[1] This was the main idea that emerged in a meeting of DAWN on women and environment held in Barbados in May 1991.

them do not perceive themselves as actors in the environment field.

Therefore, although a large number of women have been dealing with environmental issues in their communities and many women's organizations have been active in demanding public policies and legislation to ameliorate their quality of life, most of them do not perceive their work as being part of the environmental movement. This reality, intrinsically related to the invisibility of women in the public sphere, even when they are demanding to be seen, makes it difficult to give an accurate picture of women's role and initiatives in the field.[2]

It is against this background that UNCED's recognition of the pivotal role of women in the environment-development equation, embodied in principle 20 of the Rio Declaration, could be considered a remarkable achievement. Principle 20 states that "Women have a vital role in environmental management and development. Their full participation therefore is essential to achieving sustainable development." Agenda 21 was adopted as a blueprint for action, to help governments bridge the gap between theory and practice at the national level.

This blueprint incorporated strategies and activities for the strengthening of the role of women in all its chapters, especially Chapter 24 'Global Action for Women Towards Sustainable and Equitable Development'. Through Chapter 24, the Earth Summit also acknowledged that women's ability to play the pivotal role assigned to them depended to a large measure on improvements in their status.

This achievement was the culmination of long and difficult international, regional, national and local campaigns and organized activities. The ideas germinated in the actions of individual and groups of women who had defied opposition, threat, danger, denunciation and loss to defend and protect the environment which had been their source of sustenance and survival, not in the minds of the personnel of international, bilateral and governmental agencies.

Agenda 21 and Chapter 24 'Global Action for Women Towards Sustainable and Equitable Development', are like many similar declarations, a smorgasbord of exhortations and recommendations. However, they fail to pinpoint and prioritize the essential conditions that have to be created and the actions which have to be pursued in concert with and consistently by the UN and all other actors, to overcome the low status of women. As in many other aspects of development, women are not able to flourish and contribute to sustainability of development under the barren conditions of deprivation and powerlessness, nor in environments over which they have no control. This was one of the statements made by the peasant women in the National Peasant Women's Summit held in Bangladesh in 1991.

In this issue of ***INSTRAW News***, we will attempt to clarify the linkage between women's status and their ability to influence the decisions that impact on the sustainability of development. This will be done through the analysis of women's experiences in the four case study countries. The case studies' success stories will also be used to draw a map of the basic steps that need to be taken to ensure that women have a say in those decisions.

The four case studies commissioned by INSTRAW show without a shadow of doubt

[2] Paragraphs one (1) through four (4) are entirely based on an edited version of the discussion by Jacqueline Pitanguy and Selene C. Herculano in the Brazilian case study. For a more comprehensive discussion of the issues, see "Women and Environment in Brazil" in this issue of ***INSTRAW News***.

that women have been in the lead in the struggle for environmental protection and conservation. The Brazilian case puts the women's struggle in the politico-economic context of Brazil and provides insights into the various theoretical frameworks that link women with environment. The others simply document the actions of women. However, all four point to the close relationship between political and environmental movements, political consciousness and environmental awareness, and environmental activism and political liberalism.

Each case also points to the women's inability to modify the policies which were wreaking havoc with their environment and means of survival. Marginalization, as a result of poverty, non-participation and low status all contributed to their inability. Each case also outlines women's defiance in the face of adversity. They show the courageous and often dangerous stance that women at all levels took against powerful public and private interests in order to protect the environment.

Pitanguy and Herculano in the Brazilian case study illustrate this fundamental point by recounting the story of "Women Babacu Breakers", a dramatic account of women's struggle for protection of the environment which is their only means of survival. The gathering, breaking and processing of babacu, a small palm nut (coconut) which produces oil, milk, charcoal and many other useful side products, has always been the women's job in the Maranhao region of Brazil. The approximately 18.436.159 ha of land covered by babacu palms sustain some 400 thousand families who earn their living from the babacu. Women are in the main responsible for the gathering and processing of babacu —hard and physically demanding work— while men engage in subsistence agriculture.

Political and economic powers play a crucial role in the configuration of any environmental programme and project

In the 80s, farm owners began enclosing the natural babacu lands, cutting and destroying the trees to make pasture land. For millennia, the ecologically balanced region had sustained people and itself. The destruction of the trees and the systematic and violent persecution and displacement of women babacu gatherers and their families not only has destroyed this balance, but has led to loss of life and means of sustenance of thousands of people. The destruction of nature and life continues today despite the existence of a law in Maranhao State protecting babacuais (babacu breakers).

Pitanguy and Herculano cite the story of the babacu breakers because they believe "that it exemplifies, clearly, the political and economic powers that play a crucial role in the configuration of any environmental programme and project." The authors link the destruction of the babacu fields and persecution of women babacu breakers in spite of the law, to the fact of their gender, their invisibility, the disrespect

妇女在环境和持续发展中的作用
国际研讨会

Role of Women in Environmentally Sound and Sustainable Development

Volume I: Proceedings of the Workshop
Volume II: Project Profiles

Report of the
Interregional Workshop
Beijing, People's Republic of China

The State Science and Technology Commission of the People's Republic of China
All-China Women's Federation

United Nations Department of Economic and Social Development

United Nations International Research and Training Institute for the Advancement of Women

for their dignity and generally their powerlessness in society. In the Bangladesh case study, Nilufar Ahmad describes the audacity of poor rural Bangladeshi women in protesting the work of shrimp farmers, and the women's leadership and organizing capacity in defence of the natural resources which provided them with means of survival.

In these dramatic stories is the outline of the central point or direction that INSTRAW has chosen to investigate in the vast area of women, environment and sustainable development. That is, the structural relationship between the status of women and their ability to contribute to the sustainability of development.

Regardless of differences in culture, religion, socio economic conditions, and so on, the citizens' and women's ability to do anything about the environment has been linked to several common conditions. These include their participation in self-government, to citizens' rights of representation, to the decentralization of resources and devolution of power and most importantly to the organization and mobilization of women themselves.

No one can deny that the enhancement of women's status will ultimately depend on their access to health care, education, work and income. But the attainment of these goals, may very well depend not on waiting for trickle-down policies and programmes of governments, but on women's own efforts to take charge and change their situation through organized action.

The case studies show that organized action under the leadership of women has become possible in periods of political liberalization. These times have allowed the formation of citizens groups, the public discussion and debate of issues, and the opportunity for citizens to participate in decision-making even though it has been mostly in the form of permission to oppose, to criticize and to defend one's own stance or position.

Women's environmental activism and women's rights movements have never been free of harassment by the powers that be or that were, but action became possible in political climates which had at least allowed citizens the freedom to meet in a group. The cases eloquently document that women's status was raised by their involvement in environmental movements, and their success in changing their situation.

The relationship between democratization, environmental activism and women's status is most clearly established in the Brazilian case study, but referred to also in the others. The

Tahitian case, in particular, links women's participation in environmental campaigns to the evolution of a female consciousness and their deliberate attempts, through women's organizations, to raise the status of women.

Nilufar Ahmad in the Bangladesh case describes the Coastal Area Resource Development and Management Association (CARDMA), founded by Hasna Moudud, an environmental activist and former member of Parliament from Bangladesh's severely degraded and poor coastal area. Involvement in CARDMA's programmes and initiatives has dramatically raised the status of women. Led by Moudud, the parliamentary members of CARDMA lobbied the legislature to raise the general level of awareness about conservation and the value of involving women in environmental management. This resulted in the formation of a Special Committee on Environment and Development and inclusion of women in the Coastal Afforestation Programme. Adoption of legislation initiated by Moudud, which requires giving land jointly to husband and wife and to female-headed households under the Government Land Distribution Programme for Landless Peasants, immediately raised the status of women and stopped land grabbing. Women then began to plant trees and grow vegetable gardens on their land.

The important role of women, who took a leadership role for women and environmental causes, comes through clearly in the case of Hasna Moudud of Bangladesh. It is even more obvious in the case of Paula Frassineti Lins Duarte of Brazil, who overcame race, class and gender discrimination on her way to becoming the head of APAN (Paraiba's Association of Friends of Nature), an important association in the Northeast of Brazil which she and Lauro Xavier founded.

Paula is black, born into a poor family of eight in the hinterlands. She is a self-made woman who pursued education and graduated with a Master's degree in biology. Returning to the Pernambuco region, where she had taught school, she met and worked with D. Heller Camara, a progressive bishop who has committed his life to the improvement of the living conditions of the poor. Paula reinforced her belief in the importance of community organization through working with Camara. Thus she sought other biologists active in the field of environment and founded APAN when she went to work in Paraiba, another area of the Northeast.

APAN has played a major role in environmental education and advocacy based on the belief that the poor are entitled to a better quality of life and can contribute to it. In 1989, APAN succeed in obstructing and finally shelving a tourist plan proposed by the Paraiba Government which would have turned 370 ha of law-protected sites with native reef and vegetation into a complex of 16 hotels and golf courses.

For some women cited in the case studies, like Karuna Sardar of Bangladesh who was killed in an armed confrontation with shrimp growers, assumption of leadership was inadvertent and a natural extension of their decision to take charge and change the conditions of their life and environment. For others, it was either a conscious decision to seek change through existing political structures, or the leadership was thrust on them because they were seen as activists. Sayyada Ghuzmani and Parvin Hassan of Bangladesh, who mobilized various sectors of the population against toxic waste dumping in the Bay of Bengal are examples. In every case their experience of leadership in environmental struggles heightened their awareness of women's issues,

and the linkage between women's status and the sustainability of development. The story of Paula Frassineti of Brazil is particularly illustrative of the transformation that one woman went through.

In establishing the connection between the status of women and sustainable development, non-governmental organizations (NGOs) have taken a leading role. The leadership of women and environment movements often grew out of the work of NGOs or led to the formation of new organizations. In an area where government policies, programmes and interventions have been visibly lacking, ineffective or non-operational, NGOs have acted as the conscience of society and the defenders of environment and women. In their pursuit of women and environmental causes, NGOs have quite often endured lengthy confrontations with powerful elements in the public and private sectors. Not the least of NGOs' accomplishments in the case study countries is that they have provided women with national and international contacts, valuable information about international instruments for women's development and protection of environment, and much needed support and solidarity. Such is the case of the Association of Development Agencies of Bangladesh who, in a joint effort with UNIFEM, organized the National Peasant Women's Summit on Environment which opened the door to Bangladeshi women to participate in regional meetings leading to UNCED.

Environmental awareness and activism have been to a very large extent helped by involvement in development programmes, especially those promoted by international agencies and national NGOs. Networking with national and international environmentalist and development groups has also been important. In the case of the Tahitian women, the crucial experience was participation in the follow-up meeting to the 1980 Copenhagen Women's Mid-Decade Conference, and the South Pacific Commission's meeting in Tahiti in 1981 that established the Pacific Women's Resource Bureau. In the case of Brazil, it was the return of Brazilians from Europe and their exposure to such movements as the Green Party of Germany. Likewise Pacific women's anti-nuclear movements in the Marshall Islands, Guam, Palau, Tahiti, New Zealand, Australia, Vanuatu and New Caledonia have been strengthened through networking with international women's movements and women's environmentalist groups in other countries around the world.

Not surprisingly, but disappointingly, Governments have not been instrumental in sparking national movements or setting up effective state mechanisms for the integration of women into environmental issues. Contrary to the exhortations of Agenda 21, two years after UNCED, there is little evidence that Governments, at least in the case study countries, have made serious attempts to integrate women's concerns in national policies and programmes. This is the reality, in spite of the existence in all four countries of national policies and plans, and in the case of Burkina Faso, well-established mechanisms for the integration of women into the environment. One can only suppose that the wheels will be set in motion only when women are sufficiently organized and empowered to demand and insist that the written policies and plans be translated into action, and fueled by the allocation of resources.

The inertia and lack of action on the part of states has prompted some groups to refuse to recognize the state as a real

actor in the field. They rely instead on pooling and networking with active NGOs in and outside of the country. In Brazil, Pitanguy and Herculano divide the environmentalist groups in terms of strategy into those who want to work through the state apparatus and those who refuse to recognize the state as a valid actor. In the case of Bangladesh, attempts of the National Women's Action Programme Formulation and Implementation Committee to work through and with the Government was unsuccessful due to the political stance taken by the women's national machinery and the women's movement in the country.

Although in all four countries women have made some progress in raising awareness and being part of the environmental movements, the case studies also show that the degree of their participation depends on their political awareness. There is, for example, little that women can do in Bangladesh, Burkina Faso and Tahiti unless women become fully involved in political processes and obtain government support.

In the end, as Pitanguy and Herculano say "only strong government support and the involvement of environmentalists can put an end to the escalation of violence..." [against women and women groups active in environmental issues]. It is crucial that environmental programmes and projects receive active support and succeed.

The necessary conditions and state actions in support of an enhanced role for women in sustainable development can be summarized as follows:

1. Decentralization of resources, devolution of power of decision-making and government;

2. Participation of women at all levels in decision-making;

3. Creation of conditions of liberation and democratic partnership between the state and people;

4. Capitalization on indigenous and local knowledge of environmental management, such as proven and effective ancient irrigation systems and water conservation methods; use of local materials for building and shelter; refining of water methods and use of local materials and indigenous plants for stabilization of sand and earth; and

5. Empowering of the Governments of developing countries which are most at risk of succumbing to international pressure for exploitation of their natural resources for economic growth, to defend their territories and citizens' interests.

Countries must balance their macro-economic ambitions and economic goals with their micro-strategies.

Not the least of such remedies is for countries to balance their macro-economic ambitions and economic goals with their micro-strategies for the preservation of the very resources on which the fulfilment of their economic goals depend. When a country justifies wholesale destruction of its forests on macro-economic growth indicators, it is a travesty to see the same

state asking women to save biomass fuel by using more efficient stoves. In such cases, there is no consideration for the fact that the women have less and less access to the wood they used to gather, and must walk further and further in search of fuel and water. And the very same macro policies which have led to the impoverishment of the environment will force women to destroy it further out of necessity, for survival.

INSTRAW will pursue research and enquiry vigorously...

It is hardly fair to hold women responsible, either directly or in an implied manner for the scarcity of firewood caused by depletion of forests and vegetation, nor should women be expected to solve the problem of fuel shortage with little stoves, which are often inappropriate to local conditions.

The case studies clearly point to the necessity to operationalize three of the most important and little publicized recommendations of chapter 24, "Global Action for Women Towards Sustainable and Equitable Development'. These are:

24.8 (d) "Analysis of the structural linkages between gender relations, environment and development;

24.8 (e) The integration of the value of unpaid work, including work that is designated "domestic", in resource accounting mechanisms in order better to represent the true value of the contribution of women to the economy using revised guidelines for the United Nations System of National Accounts; and

24.8 (f) Measures to develop and include environmental, social and gender impact analyses as an essential step in the development and monitoring of programmes and policies."

These recommendations head the following major themes and programme areas of INSTRAW's 1994-1995 biennium Work Programme respectively.

Theme I: Empowerment of Women.

Theme II: Statistics and Indicators of Women's Status, and

Theme III: Women, Environment and Sustainable Development.

The path for INSTRAW's work is clearly marked. INSTRAW will pursue these lines of research and enquiry vigorously and to the best of its expertise and resources. It will make the information available to its broad and extensive network of focal points and interested groups. It is up to women, men and organizations, whether governmental and non-governmental, environmental or otherwise, to incorporate the information and knowledge into their actions.

TO RIO AND BEYOND: *The case of Brazil*

Introduction

Brazil has paid a high price for the development policies that transformed it, from one of Latin America's poorest coffee-growing countries into one of the world's ten largest economies, within four decades. Brazil today is plagued by massive debt, galloping inflation, stagnant economic growth and widening disparity between the rich and the poor. For example, the richest 20% of the population earn over 65% of the national income while the poorest 20% earn less than 3%. Furthermore, 2% of the country's farmers own over half the arable land and almost half the population lives below the poverty line.

Brazil's environmental problems have grown over the years along with its GNP. The situation is worst in the impoverished and overpopulated Northeast, where deforestation, soil erosion, air pollution and overuse of fertilizers have deteriorated the environmental conditions and the quality of life of its inhabitants. The rapid growth of Brazilian cities and industries, especially in the Northeast, has spawned huge, overcrowded slums:

shantytowns *(favelas)* plagued by inadequate water and sanitation, appalling urban pollution, disease, and the risk of landslides and other calamities triggered by environmental degradation. Infant mortality is twice as high in Brazil as in China, despite a GNP seven times as large. And, home to two-thirds of the Amazon rainforest (3.3 sq. km. of the total 3.5 sq. km.), Brazil's development policies have encouraged the clearing of over 8% of the forested area within its borders for farming, mining and other uses.

Brazil's poor suffer most from its environmental woes, especially its poor women. Some 20% of Brazil's 35 million families are now headed by women. Most of them are poor and live with inadequate sanitation: over 90% of children under a year old in the Northeast live in homes with inadequate sewage systems.

Women's participation in the labour force has grown rapidly, from 15% in 1950 to 39% by the beginning of 1990, according to the Brazilian Institute for Statistics and Geography. But women still earn only 52% of what men do, are still barred from many jobs, still perform uncounted hours of domestic work, and take on additional income-earning tasks when they must. Women make up a large portion of Brazil's many "informal workers" who do not have access to professional cards or social security benefits. Finally, women represent but 5% of the House of Deputies and .24% of the Senate.

Environmental and feminist issues have, for the most part, been dealt with by government and civil society as separate issues. Women in Brazil, however, have been concerned about environmental degradation and its effect on the quality of life for decades. This concern was not translated into political action of any importance until both the environmentalists and the feminists organized and gained political leverage. The case of Brazil illustrates how environmental and feminist issues developed within a changing political environment and how the democratization process provided the necessary conditions for dissent and participation. It also illustrates how NGOs are sensitizing and mobilizing women, emphasizing women's rights as citizens in demanding a healthy environment. The extent to which women can demand this citizen right will determine the extent to which the political will that has been gained can be operationalized.

Environmentalism in Brazilian civil society

Despite some governmental codes dictated in the early 1930's, for may decades environmental concerns in Brazil were mostly the expression of concerned citizens, first of conservationists and later of those who opposed the predatory development practices of the military regime that took power in 1964. It was the non-governmental sector that mobilized public opinion demanding the government to incorporate environmental concerns into its agenda. Women, as part of this sector, and in the face of increasing economic and social deterioration demanded improvement in the quality of life and in this way have contributed to environmentalism in Brazil.

In 1944, in Rio Grande do Sul, the southern state of Brazil, Henrique Roessler first began a crusade against the devastation of the rain forest by timber traders and hunters. In 1955, he founded the Union to Protect Nature and raised public opinion on the issue of environmental degradation. In 1958 he founded the Brazilian Foundation for the Conservation of Nature.

In the late 1960s, the defense of the rain forests against external exploitation became part of the agenda of the opposition to the military regime which took power in 1964. In 1966 a campaign was launched by diverse groups of citizens who opposed the "internationalization" of Brazilian territory. This initiative consolidated into the National Campaign for the Defense and Development of Amazonia (CNDDA) which resisted and denounced the Hudson Institute's futurologist Herman Kahn and their project to submerge the Amazonia in a huge lake. Shortly after this, other environmental organizations were founded. Among these, it is important to note the establishment of the first women's environmental organizations, the Democratic Association of Gaucha Women (ADFG) in Rio Grande do Sul and the Gaucha Association to Protect Natural Environment (AGAPAN) which was founded by a woman.

The political amnesty granted in 1979, brought many Brazilians who had been in exile

Jacqueline Pitanguy is the founder of Cidadania, Estudo, Pesquisa, Informacao, Acao (CEPIA), a Brazilian women's NGO dedicated to research and advocacy, and former president of the National Council for Women's Rights (CNDM) in Brazil. Selene Herculano is a sociologist with experience in community work.

Rondonia, Brazil.
Area was cleared for the Alto Paraiso
tin mine. Once a paradise, it will be
a desert for the next millennium.
Photo: Paulo Nogueira-Neto/Agencia

in Europe and who had been in contact with the Green Parties that had in their platforms not only environmental, but also feminist issues. Since the early eighties, environmental issues became a political issue and found a close ally in the feminist sector.

In the mid-eighties, new environmental agents came forth, such as the rural workers unions and associations which, since then, have played a most important role. For example, in 1985 the National Council of Rubber Tappers was created to defend the project of extractivist reserves in the rain forest in the northern states who share the Amazonian forest. Other similar unions were the Movement of the Expropriated, the National Movement of the People Caught by Hydroelectric Dams and the Alliance of the People of the Forests.

In 1986 the Brazilian Green Party was founded and developed its agenda in close connection with the Workers Party which represented a new, modern labour consciousness, and which included a number of other questions, like women's rights, in their platforms. This, however, did not mean that a link was seen or made between women and environment.

In 1986, environmental

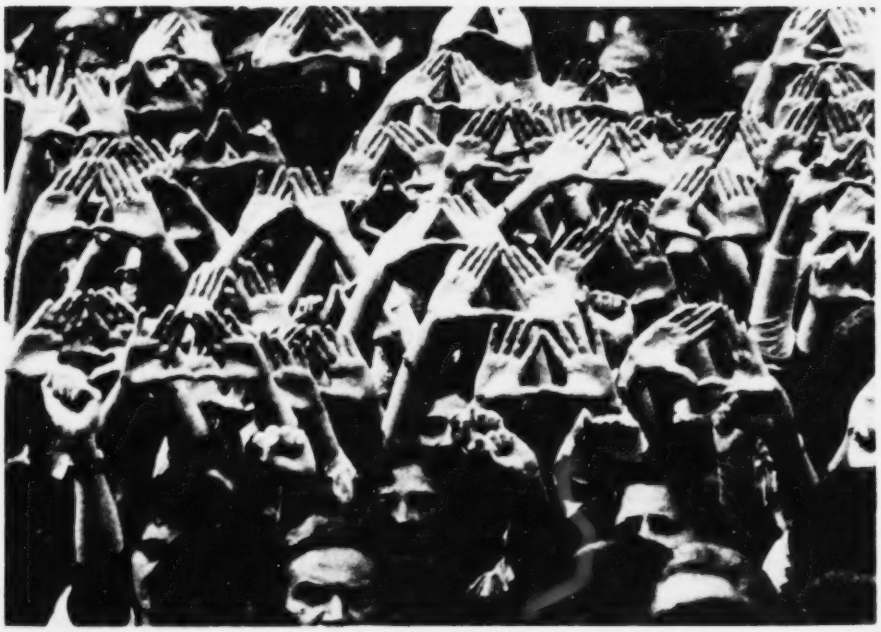
movements in Brazil launched their national coalition when they joined in the first National Encounter of Autonomous Environmental Entities (ENEAAS). From 1986 to 1991 three ENEAAs were held, with the basic aim of pressuring for environmental policies and strengthening environmentalist coalition. Since 1990, the environmental movement shared with other Brazilian social movements (women, blacks, indians, trade-unionists, youth, rural workers, people caught by dams, etc.) the criticism to the model of development that Brazil had adopted for four decades.

The Forum of NGOs emerged from the entities that had participated in those encounters and incorporated other representation of other groups such as indians, women, black movements, trade unions, other grass-root organizations and some research institutes. Since it was created in June 1990, it has held eight national meetings, in different states of the country. By December 1991, nine hundred and eighty seven NGOs were registered as members of the Forum. Many of those organizations have branches in different states and thus it is calculated that over a thousand organizations are affiliated to it. The Brazilian NGO Forum works in close connection with environmental international networks, such as Friends of Earth, Greenpeace and Third World networks and Latin American social and environmental coalitions such as the Chilean Forum, among others.

As a result of this coalition, the Report from Brazilian Civil Society to UNCED was prepared. This report called attention to the environmental consequences of the economic and political process of exclusion of civil society of the last 40 years. It also reflected the common concerns of Third World countries in terms of development and environment.

The first Brazilian law to protect the environment —and the only such law passed for three decades— was the 1934 Code on National Parks. The Stockholm Conference, with its recommendation for the creation of national environmental machinery influenced the establishment in 1973 of the Special Secretary on Environment (SEMA), subordinated to the Ministry of Interior (Ministerio do Interior). However, those first initiatives did not express a real commitment of the Federal Government with environmental protection. It is important to point out that this initiative, including various codes, were created in a moment of significant economic growth by means of industrialization and huge investments in infrastructure, where the concern for the more long-term effects of such policies was not part of the agenda of the government or of the private enterprises (national and international) that were investing heavily in Brazil.

In fact, it is only in the 1980s that the government took a clear position in relation to environment, not however as a value in itself but as an important instrument for other goals. A law passed in 1981 considered the environment as a means to assure development, national security and protection of the dignity of human life. The National System on Environment (SISNAMA) was created with a Council (CONAMA) mandated to help the President in the formulation of policies. Initially, CONAMA was composed of representatives of the federal ministries and representatives of the governments of each state. Representatives of the Federations of Industry, Trade



and Agriculture were also included as were representatives of the FBCN, the Brazilian Association of Sanitary Engineers (ABES) and environmental associations.

However, only in 1984 does this council start to operate as a result of the relevance of environmental issues in civil society which had become part of the agenda of a number of civil organizations and was gaining support in the political parties.

After 1986, with the election of a civil president and the election in 1986 of a new Federal Congress with the mandate to elaborate a new constitution, environmental issues became an important part of the agenda of the Federal Assembly.

The constitutional process, which began in 1986 and culminated with the promulgation of the new National Constitution in 1988, provided a rare moment of democratization of the legislative. This process included the massive participation of all sorts of civil organizations such as indians, blacks and women.

Environmentalists participated intensely in this process, struggling against powerful economic interests of mine owners, cattle farmers and various industries, claiming that a commitment with the preservation of nature was a citizenship right.

Hence the Federal and State constitutions' provisions on environment are quite progressive and reflect the political weight of those groups, supported by the legitimacy of their demands.

In 1990 a more important Environmental Secretary was created (SEMAM), linked directly to the Presidency and in charge of the formulation of environmental policies. In the same year, a Superior Council formed by representatives of the ministries and by the Intelligence Department (SAE) was also created to deal with environmental policies. With the establishment of these two bodies, CONAMA lost power.

In 1990, a new document was produced as a framework for environmental policies. It posed (five) strategies: the solutions to environmental problems have to take developmental aims into consideration; NGOs and the private sector need to participate in environmental policies; the environmental government structure should be centralized by federal sphere; sectorial activity should be also included as part of environmental policy. Almost two years later a new internal document put these ideas in more concrete levels.

The perspective of the government in relation to environmental issues is not necessarily shared by environmentalists in civil society. Government still sees environmentalists as a kind of menace. The national security approach is still embedded in governmental ways of dealing with environment.

At the State level, the organization of the different

organs dealing with environment has a similar structure. All the organs and institutions are related to the executive sphere. Thus, each state of the Federation has a Secretary of Environment, a Council, a Fund and institutes for the inspection and execution of programmes.

IBAMA's Report of Activities and FNMA's list of projects indicate that the environmental programme of Brazilian Federal government is almost completely dedicated to Amazonia issue.

Feminism in Brazil

Feminism can be seen as a social movement which creates and projects a new collective identity in the social sphere. The creation of such identity is based on the perception and the experience of gender hierarchies and discriminations, both in the public and private space. These perceptions and experiences direct the survival strategies of women in unequal societies and lead them to assume different forms of political struggle and political participation.

The configuration of such participation either in institutional levels or in grassroots social movements, as well as the success of their collective action, is related to the structural characteristics and the circumstances prevailing in each society. Those variables, plus the specific capacity of the protagonists in making their voices heard and in influencing societal arrangements, are responsible, to a large extent, for the relative weight of women, as an organized political category, in the balance of power.

In Brazil, feminism has played an important role in the cultural sphere of values and customs as in the denunciation of women's exclusion from power from full citizenship and from social dignity.

After two decades of struggle from the grassroots level up, feminists have been able to place the question of gender discrimination on the national agenda, although it is still not viewed as a major issue. While still low, the relative participation of women in the legislature has increased significantly in the last decade. Women earned the right to vote in 1932, but have never represented more than 5% in the legislature. Their participation in labour unions is also significantly lower than that of men.

Feminism in Brazil as an organized social movement dates from 1975, when a seminar was organized in Rio de Janeiro under the auspices of the United Nations during the period of military rule. From then until the election of the first civilian president, Brazilian feminism grew as a social movement not only in terms of the number of groups organized to improve the conditions of Brazilian women, but as a new political culture that has pointed to non-authoritarian ways of exercising power.

Until 1979, however, no political party incorporated women's demands into its programmes and women were forced to operate outside of institutional channels. They focused on discrimination against women in the labour market, the absence of day care centres for the children of female workers, the sexual stereotypes which lead to gender discrimination in education, the crucial questions of violence against women and reproductive health care. A feminist press was initiated and labour unions and professional associations incorporated these issues in their discussions.

By the beginning of the 1980s, women's issues had become part of the public debate. The more progressive of the new political parties began to incorporate women's demands in their platforms. There were still, however, no systematic linkages between the women's movement and the environmentalists.

"It is thus in the struggle against the deterioration of their living conditions, that women are playing a major role in the environment debate."

Redemocratization brought with it the opportunity to create spaces in the government apparatus for women and to use structures that already existed to respond to women's demands. Councils for Women's Rights were established at the Federal, State and Municipal levels, to help implement demands from feminist organizations for policies to fight violence against women, job discrimination and in favour of day care. In 1985, the National Council for Women's Rights was established. The Councils, along with women's NGOs, participated in the formation of the new constitution during 1987-1988, and were successful in incorporating many provisions on social benefits, labour rights and reproductive health. Most of these have yet to be incorporated into specific laws, however; and gender prejudice remains deeply rooted in Brazilian society.

Although in the late 1980s the National Council was disbanded in the face of opposition and budget cuts, the women's movement in Brazil remains very active through local councils and NGOs. Women continue to demand equity under the law, in the labour force, in domestic and public life, focusing on violence against women, reproductive rights and education.

Initiatives in the field of woman and environment

Analyzing the activities related to environment of 35 women's NGOs in Brazil, most of the activities center on sensitizing women to seeing the environment as a citizen right and at understanding the link between poverty, environment and women. The other major concern of these NGOs involves reproductive health and new reproductive technologies.

Quality of life provides the basis of the linkages between the categories women and environment. This linkage has been built around the struggle for a better livelihood, comprising the access to sanitation and proper housing, to health care and education, to the right to live in a balanced and healthy environment and in harmony with the demands and rhythms of the body. It is thus mainly in the struggle against the deterioration of their living conditions, and of those of their families, that women are playing a major role in the environment debate.

It is, however, important to point out that even if women, specially of low income level, have been the main agents in the struggle for better quality of life, many of them do not perceive themselves as actors in the environmental field.

The frame of reference into which the initiatives on women and environment would be classified, is very broad. It should leave room for the inclusion of specific questions related to female physiology, such as the relation between acid rain and abortion, of pollution and low weight of premature babies, of the work in certain pharmaceutical industries and its effects on menstrual cycles and fertility, of agrotoxics and fetus malformation. It should also provide a linkage between women and environment on the gender perspective, emphasizing, thus, her social role and the effects of social and economic variables on her daily life. In this sense, the issues of desertification, compulsive migration and its specific effects on women, as the ones mainly

responsible for the guarantee of the survival of her children, open a vast area of questions. Environmental degradation, then, has both physical as well as social effects on women.

The activities related to environment of 35 NGOs analyzed can be grouped into the following areas:

- sensitization of women to the quality of environment as a citizenship right and to the links between poverty, environment and women
- popular education and development of information center on women and environmental issues
- environmental education in the schools
- research on varying topics such as technological alternatives; women and ecosystem management; reproductive health and contraceptive technologies; population issues
- community based activities aimed at assisting women in management and trading of natural resources
- advocacy for legislation.

Population: linking women, environment and development

Brazilian women's NGOs today are focusing on the discussion of population and the environment as population growth has been taken by many as the cause of environmental degradation. The policy implications of this thesis, particularly in a military regime, is an emphasis on population control rather than women's reproductive rights and health. This orientation, which still persists, has led to a divorce between the women's movement and family planning programmes oriented toward the achievement of demographic goals rather than toward women themselves.

The dramatic decrease of birth rates in Brazil (the annual birth rate is down to 1.8% from 2.5% a decade ago) and the significant weight that sterilization has played in this decrease (some press reports say that half of all married women between 15 and 45 have been sterilized), have made the question of choice and the quality of care a crucial one. At the same time, the fact that this decrease in population growth has not meant an increase in the quality of life indicates clearly that more complex analyses are needed, linking the prevailing development model to environmental degradation.

Supported by a strong international movement, Brazilian women have refused to surrender their right to make decisions about their own bodies to the rationale of population planners. Despite the differences among Brazilian women, they agree that high birth rates are not a cause of poverty but a consequence of it and that it is time to talk about the explosion of poverty, not population.

Reflections on eco-feminism as a new political culture

The shaping of a link between women and the environment raises a number of questions at the theoretical and analytical level. Although in the 1960s and 1970s, feminist literature highlighted the historical and political process of the social construction of female identity, more recently a new environment paradigm is bringing new questions to feminism.

This new paradigm, which comes to be referred to as "eco-feminism", brings forth women's association with nature as a wealth rather than a handicap. Women, in this new vision, are conceived as the guardians and rescuers of the world and life.

Until recently most of the studies on women in Brazil emphasized the linkage between social and economic variables and gender. These studies focused on such issues as

women's rights, sexuality, public policies, female work, feminization of poverty, women and political participation, among others.

More recently feminist studies are addressing the puzzling issue of female identity and questioning whether there is a feminine "essence" independent of "history" that defines this identity.

While, in our view, women and the environment do not constitute ahistorical essentialist category and one must not forget that subjectivity itself is constructed and mediated by social practices and discourses, the belief in a feminine "nature" or "essence" reflects larger perspectives and have political consequences.

The proximity of women and nature is part of a process of revaluation of the societies of the South and of a criticism of the "civilizing" process of the North which has generated destruction of nature and of human beings and created societies of over-consumption, responsible for the pollution of their own environment and of those of developing countries.

Eco-feminism then emerges as an ethical claim against an immoral pattern of development. In our view, however, environmentalism is a new field providing a new space for struggles and negotiations, where groups attempt to gain hegemony and to conquer legitimacy. Feminism, as a political movement for the redefinition and enlargement of women's place in society and nature, cannot be simply a project of bringing visibility to the "essence of gender," but to produce the conditions of visibility for the emergence of a different social subject.

"So, babaçu is our family..."

I am a woman breaker, no family, no dependents
Nobody could inform me when
I was born, where I come from, who I am
So, babaçu is our family, our father and mother, who
gives us food, shelter, everything
But now things are difficult. The farmer
seized the land, killed many babaçus, pursued
the poor. Despite all this, we keep on going there
and breaking babaçus. We walk a lot,
we have to run from the cattle. There was no owner
of the babaçu, no one ever planted or watered it
But today the babaçu is closed
They have already promised to beat me if I enter in
other's pastures, but we go and break"

Words of Antonia Pereira da Silva Picarra, Lago do Junco, Maranhão

Governmental policies on women and environment

If we take a[n] basic avenue fo[r] environment from a gender perspective, the question of quality of life, women have been demanding and proposing public policies for the improvement of lifehood conditions during the military regime and all

along the redemocratization process.

One of the characteristics of the programmes of the Brazilian Government explicitly directed to environment is the absence of gender preoccupations. The environment approach of the government is mainly naturalist, preservationist or conservationist. PNMA deals mainly with forests and priviledges the Amazonian rain forest with a fundamental concern with the natural habitat rather than on its populations. PNMA does not deal with agricultural policies which is under the mandate of the Ministry of Agriculture where large land owners who favour large scale monocultures for exportation, heavily supported by pesticides, agrotoxics, deforestation etc. as well as powerful cattle raisers, still predominate. Inside the Ministry of Agriculture, the *Coordenadora* has brought the question of gender to agricultural policies, highlighting the situation of female rural workers. In the 80s the National Council for Women's rights developed joint actions and strategies with this programme, but it was deactivated. The IBAMA (Brazilian Institute of Environment) has two projects which are gender oriented. One

Gender is not an integral part of environmental projects

is related to the study of the working conditions of the *"marisqueiras"*, the women who dig molluscous. The study is being developed by NEIM, Nucleus of Woman Studies of the University of Bahia. It combines, both the protection of the mangroves and the creation of health and just working conditions for these women.

The other is related to the "quebradeiras de Babacu" in Maranhão state. It focuses on women who earn their living by breaking coconut whose pits are used in food oil and soap industry. This project is very interesting and will be described later.

Official policies and action plans of the various states do not explicitly link women and environment. Gender is not really an integral part of environmental projects.

The lack of gender oriented policies however does not mean that women are absent from governmental bodies dealing with the environment. On the contrary, many women have occupied high positions on such organs. IBAMA has been directed by women, many of the engineers and biologists in charge of technical issues are women. Several representatives of the environmental movements in CONAMA are also women.

In conclusion, although there is in Brazil a substantial participation of women in environmental issues and a large number of women are recipients and multipliers of projects related to environment and gender, governmental agencies have not yet incorporated gender as a variable to be taken into consideration in their programmes.

Women and environment: the United Nations System in Brazil

Even though gender considerations is a clear guideline for UN organs and agencies, the majority of the national projects related to environment developed with the support of the System do not have explicit gender preoccupations. Only seven projects were identified dealing with gender issues.

Since the linkage between women and the environment is still a new field of knowledge, of action and of political change, and has yet to be established in a more firm and mature way, women still face difficulties in bringing this issue into governmental and UN projects and programmes.

Case study of the babacus

Women are in the main responsible for the extractivist activity of the babacus. Women work in groups, picking the coconuts and carrying them to the place where the breaking is done. It is also the women who perform this hard task of breaking the coconut. To produce 10 kg of babacu almond, they have to assemble 120 kg of coconuts. A woman can produce up to 15 kg of almonds in 8 hours. Food oil and soap industries are the main recipients of this raw material.

For years, subsistence of these families has been guaranteed in Maranhão by means of this activity. Men are in charge of the subsistence agriculture, planting rice, corn, beans and manioc in the middle of the babacuais. The coconuts reproduce themselves in their natural cycle, there is no need of agrotoxics or fertilizers and the babacuais ecosystem is protected. However, in the 80s farm owners have been enclosing the babacuais and destroying them to make pasture and women breakers and their families have been, since then, systematically persecuted and the use of violence has even led to deaths of rural women. Nature is being destroyed as well as human lives, although there is a law in Maranhão state protecting babacuais.

This case exemplifies clearly the political and economic powers that play a crucial role in the configuration of any environmental project. Brazilian babacuais and women babacu breakers lived in harmony supporting one another, but now they are both being destroyed by the patterns of economic growth and maximization of profit which are predatory to human beings and to nature.

Babacu breakers are women, their activity is less visible, their persecution less known. Only strong government support and the involvement of environmentalists can put an end to the escalation of violence in the babacuais.

Paula Frassineti Lins Duarte

Paula Frassineti is the head of a very important environmental association in the Northeast of Brazil. She grew up in a poor black family. Her father was a tailor and police traffic officer and strongly believed education would provide a better life for his children. Paula became a school teacher and later obtained a university degree in biology. Returning to Pernambuco, she became acquainted with a progressive bishop who committed his life to the improvement of the living conditions of the poor. She then reinforced her impression about the importance of community organization. In 1978 she made contacts with other biologists who were very much involved with environmental questions and founded APAN (Paraiba's Association of the Friends of Nature) along with another biologist. APAN has played since then a major role in Brazilian environmentalism. They do both educational and advocacy work. They work mainly with poor children and they center their work on enforcing the idea that they have a right to quality of life and that they can contribute to it. Paula takes children on educational trips teaching them about the preservation of natural resources and teaches peasants on the risks of agrotoxics and of their rights to a healthy work environment. Their advocacy work has succeeded in stopping a government tourist development project which would have destroyed 370 ha of law protected sites. APAN also achieved to have an article approved in the State Constitution which forbids high buildings at the seashore.

STRESSES AND STORMS: *The case of Bangladesh*

Bangladesh is plagued with a vicious cycle of population pressure, poverty, degradation of natural resources and vulnerable climatic conditions. In the Human Development Report of 1993, Bangladesh ranks in the 147th position (of a total 173). The Real Gross Domestic Product (GDP) per capita in 1990 was $PPP[1] 872, compared to a maximum among the developing countries of $PPP 15,880 and a minimum of $PPP 367.

The situation of women is no less alarming. It is one of the very few countries in which the life expectancy of women is lower than that of men. It has the lowest reported average age at first marriage and the maternal mortality rate is 650 per 100,000 live births, compared to a maximum in developing countries of 1000 in some countries and a minimum of 6 in others. Life expectancy of women at birth is 51.8, compared to a maximum of 80.1 and a minimum of 43.0

On the other hand, in the 20 years of its existence as an independent nation, Bangladesh

has provided a political climate of democracy and liberalization and committed itself to improving the condition and situation of women. More recently, it has also begun to address its multiple environmental problems although progress is slow.

The case study of Bangladesh illustrates how despite social and cultural norms limiting the mobility of women and their access to essential services and resources, changing environmental and economic conditions have forced and allowed women to become involved in non-traditional occupations and in environmental actions as a means of securing their and their families' livelihoods.

It illustrates the difference that women in decision-making positions can make in promoting women's concerns and involvement in environmental management. On the other hand, it also shows that women still face many cultural, social and political constraints that limit their involvement at a policy level.

The case of Bangladesh shows how women's leadership and organizing ability has contributed to raise environmental awareness in that country at all levels.

Bangladesh has been identified as one of the worst affected areas and probably the largest single group of people to be most affected by the sea-level rise as a consequence of greenhouse effect (Moudud et al. 1989). It sits on the largest delta in the world and half the land

[1] Purchasing, power parities (PPP)

area of the country is less than 10 meters above sea level.

Global warming, mostly a result of industrial emissions of developed nations, has caused enormous run off from the Himalayan drainage system pouring into Bangladesh's major river systems. It is affecting rainfall pattern and increasing the occurrences of tropical storms. Deforestation upriver on the slopes of the Himalayas is another major contributing factor, releasing so much topsoil into the rivers that they overflow their banks in heavy rains, overwhelming Bangladesh's inadequate flood control plans.

Flooding, cyclones and coastal inundations are regularly occurring natural disasters. Nearly 20% of the net cultivable area is severely and moderately prone to floods. In the catastrophic flooding of 1988, 120,000 of Bangladesh's 144,000 square kilometres were inundated.

The severity of these natural hazards are magnified by the country's large population, its poverty and its other environmental problems. Bangladesh ranks as the world's eighth and Asia's fifth most populous country. Its 114 million people live jammed in 760 persons per km² making this one of the most densely populated areas of the world. Because of the intensive land use and biomass shortage, cultivated soils are now being depleted of essential nutrients and organic matter. Fishing, livestock, forestry resources are also under increasing environmental strain. Half of Bangladesh's forested area has been destroyed in the past 20 years and it is estimated that if the present rate of exploitation continues, natural forests will disappear in 16 years.

While vulnerable to cyclones and flooding, Bangladesh also suffers from severe droughts due in part to the increase of evapotranspiration resulting from global warming. The drought spells of 1967, 1972, 1978/79, 1981/82 caused severe agricultural and other losses.

Over 80% of Bangladeshis live in rural areas, but cities are growing rapidly — too rapidly for living conditions to keep up. Half the urban population, where a quarter of all Bangladeshi are expected to live by the end of the century, will live in slums with inadequate sanitation, water, energy supplies and waste disposal systems, exposed to increasingly polluted air, soil and water from motor vehicles, industrial plants, power generators and human waste.

Deforestation

Forestry accounts for about 4% of Bangladesh's gross domestic product, providing commercial timber and raw materials for industry, supporting biological diversity, conserving and protecting soil and water, and offering areas for recreation and tourism. Today deforestation has left each Bangladeshi with less than .02 hectares of forest land, one of the lowest ratios in the world.

Deforestation is the result of too many people cutting timber for fuel and commercial use, and for conversion of forested land to agricultural use. About 70% of inland deciduous "sal" woodlands have been heavily depleted; and in the hill areas,

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is a development economist whose work has focused on agricultural and environmental problems in Bangladesh. She also has done consultancy work for national and international organizations on women in development issues. She has published several articles on women and labour force participation in Bangladesh and on the impact on women of donors and non-governmental organizations.

large areas of forest have been denuded by shifting cultivation or in order to plant pineapple, rubber or other cash crops.

More than 90% of Bangladesh's state-owned forest is in the southern part of the country. Overharvesting is prevalent here, due to underpricing of wood products and illegal logging. Half of Bangladesh has no public forest at all, but uses small "homestead forests," each of which covers perhaps a third of an acre or less of privately owned land. Homestead forests typically contain fruit tress for food, timber, fuel and fodder, and other species for medicines and building poles. Although they account for only a quarter of total forested land, homestead forests contain the majority of the country's stock of forest products and are a vital source of food and income. But these, too, are being depleted by the combined pressures of population and poverty. Women are the prime users and managers of the homestead forests.

Deforestation is directly responsible for severe economic, social and health problems. It leads to soil erosion, contributing to river siltation and greatly increasing the damage due to seasonal flooding. Fuelwood scarcity makes boiled water an unaffordable luxury, increasing the incidence of diarrhoea (which kills over 200,000 people per year) and other intestinal ills. Due to lack of biomass fuel many people have to be content with cold meals or varying their diet with more uncooked and often less nutritional foods. It forces women and children to spend increasing amounts of time gathering fuelwood over greater distances, and leads to the widespread use of cow dung and crop residues for fuel, thereby diminishing soil fertility and reducing crop yields. In urban areas, women use industrial waste instead of fuelwood, contributing to air pollution due to the emission of toxic fumes.

Drying the wetlands

Bangladesh's coastal areas, which have been largely neglected and underdeveloped, are home to a quarter of its population. Many have moved there because flood, drought or environmental degradation has destroyed their way of life on the mainland. They have no experience in dealing with the cyclones and storm surges that are regular occurrences along the coast, and are among the country's most vulnerable populations when disaster strikes. More than 100,000 died in the 1991 cyclone and the lives of millions more were disrupted by the loss of homes or livelihoods, sickness or injury.

The seasonally or partially flooded areas of Bangladesh (called haor, baor and beels) are state-owned, and produce nearly half a million tons of fish a year (53% of the total), providing employment to over a million fishermen and indirectly employing the 10 million more who live in the coastal areas. These wetlands, some of which are leased from the state, are being rapidly converted to agriculture and to the production of shrimp for export. Intensive irrigation for farming is resulting in heavy deposits of sediment, destroying the wetlands. Fish are dying out as a result, depriving local populations of their major source of protein in a region that already has Bangladesh's highest rate of malnutrition.

Shrimping areas are intentionally flooded by shrimp growers with seawater. The increased salinity affects adjacent land as well, contributing to loss of vegetation, plants, livestock, human livelihoods and drinking water and aggravating conflicts between local poor people and the wealthy shrimp farmers.

Along the west coast sits the Sunderbans mangrove forest, the

largest such ecosystem in the world. Crucial for absorbing floodwaters from cyclones and storm surges and important for biodiversity, 40% of the forest has been destroyed for shrimp cultivation, by other ill-advised land and water management practices nearby, and by marine pollution. The Sunderbans has lost 14 species unique to it in the last quarter century, and the Royal Bengal Tigers who still live there are threatened.

Further destruction could also have an impact on climatic balance because of the forest's role in carbon dioxide absorption.

Bangladesh's coastal lands are also threatened by global warming. Ironically, although its relative contribution to the greenhouse effect through fossil fuel combustion is small, Bangladesh stands to be among the most severely affected by a rise in sea level trends because it is so low-lying. If the World Health Organization estimates that sea level will rise anywhere between 20 c. and 1.5 metres by the year 2030 proves correct, agricultural lands stand to become too salty to cultivate, or to be completely flooded. A one-metre rise would wipe out the Sunderbans.

Floods and excessive use of agrochemicals

Chemical fertilizers and pesticides have been used extensively in farming since the 1960s, and agricultural production has increased substantially as a result. However, excessive use of chemicals is threatening the continued stability and sustainability of the agricultural production system through decreased soil fertility, water pollution and resulting destruction of fisheries.

Chemicals also have severe effects on living creatures who come into contact with them. Cultivators exposed to chemical fumes, especially women who stand in muddy water for long periods transplanting rice, suffer skin, nail and eye irritation and deteriorating health. Pesticides kill insects beneficial to agriculture while encouraging the development of resistant strains of harmful insects.

Poorly planned flood controls magnify these effects. The fertility of soil in flood-free zones declines over time because it does not receive the benefit of normal annual flooding and the sediment load it deposits. Extra inputs of chemical fertilizers and pesticides are therefore used, resulting in pollution of drinking water and other health hazards to which women and children are most vulnerable.

The rapid increase of the urban population is deteriorating the housing, sanitation, water/energy supply, waste disposal and the general living conditions of the population.

Urban air is filled with growing amounts of organic and inorganic chemicals as well as effluents from motor vehicles, industrial plants, thermal power generators, cottage industry and natural sources.

Lack of proper sanitation, open latrines, disposal of garbage, and often sewer cause air, soil and water pollution.

Most women in Bangladesh are not only poor but also caught between two vastly different worlds — one determined by culture and tradition that emphasizes their reproductive role and the other shaped by increasing landlessness and poverty that forces them outside the family unit into wage employment.

Not only are women members of landless and near landless families being allowed by husbands or male guardians to take paid employment outside the homestead due to increasing needs. Strains from poverty are causing families to break up, familial support systems to decline and households headed by females to increase due to divorces and desertions as men migrate from rural to urban centres in search of employment.

Despite women's insertion into the labour market, they lack access to services that can prepare them for this new situation. They have limited economic opportunities and continue to occupy subordinate positions in the household and the economy. Women now comprise the largest share of those living below the poverty line.

Only about 25% of women are literate, compared with 48% of men. In 1987, only 44% of spending on primary education, 32% on secondary education and 13% on university education was for girls (World Bank. 1990). Women also face discrimination in wages and in fact earn 50% less than men. Despite laws on the books that provide women equal rights with men and protect them from discrimination, women are usually either unable or unwilling to seek legal redress when their rights are violated.

Women's participation in agriculture is changing as a result of the deterioration of socio-economic conditions in the rural economy. While traditionally women were involved primarily in post-harvest crop processing and homestead activities, with men increasingly

(Continued on page 32)

[2]This and the next two sections are principally based on: World Bank Country Study. Bangladesh: Strategies for Enhancing the Role of Women in Economic Development. 1990. Washington, D.C. and Asian Development Bank Country Briefing Paper. Women in Development: Bangladesh. 1986

Women's Environmental Network (WEN)

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London N5 2EA, England
Tel : 071-354 8823

The women's Environment Network (WEN) was established in 1988 as a non-profit, activist, information and membership organization dedicated to educating, informing and empowering women who care about the environment. Recent information campaigns have included raising awareness of the environmental impact of overpackaging, sanitary protection products, dioxins (by-products of chlorine bleach), and the effects of single-use consumer goods. WEN's work also highlights the portrayal of women in advertising and marketing strategies, and the status of women in decision-making processes in industry, local, and national government.

WEN seeks to offer positive alternatives rather than simply discouraging the use of certain products (for example, promoting reusable cotton handkerchiefs, sanitary napkins and shopping bags). WEN has also recently contributed ideas and information to the Parliamentary Select Committee on Eco-labelling, after campaigning for clear and precise environmental information on the packaging of products.

WEN representatives participated in the first Global Assembly on Women and Environment in Miami in November, 1991 and in the NGO preparations for the Earth Summit in Rio de Janeiro in June, 1992.

WEN is staffed mainly by volunteers. It currently has over 2,000 members, with 15 active local groups and more than 100 affiliate organizations.

Irish Women's Environmental Network (IWEN)

Carmichael House
Brunswick Street North
Dublin 7, Ireland
Tel : (00 353 1) 73 26 60
Fax: 73 57 37

The Irish Women's Environmental Network (IWEN) is a voluntary organization founded in 1991 whose objective is to provide women with the information that can empower them to act for the environment. IWEN produces a newsletter which updates members on local and global environmental topics, and its members speak to the media, women's groups and students about these issues. IWEN also organizes conferences and seminars and is especially concerned about bringing to public attention the interdependence of women, environment and development.

In 1991, IWEN was invited to attend the Global Assembly on Women and the environment in Miami; and in 1992 it received funding to participate in UNCED as part of the Irish NGO delegation. IWEN is actively involved in the network of development and environmental NGOs in Ireland which was established prior to the Earth Summit.

As a voluntary group, IWEN depends on membership subscriptions and grants to cover its financial needs. It has a current membership of approximately 160.

WEN
nt Networks

WorldWIDE Network (Women in Development and Environment)

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WorldWIDE Network is a dynamic and innovative international network of women who are actively solving environmental problems. Its goals are to mobilize and support women, individually and in organizations, in environmental and natural resource programmes to promote the inclusion of women and their environmental perceptions in the design and implementation of policies; to educate the public and policy makers about the vital links between women, natural resources and sustainable development; and to expand a global network of women concerned with environmental management and protection.

During the past few years, women from all over the world with expertise in various environmental fields have joined the Network, which now consists of 6,850 individuals and organizations in 125 countries. As part of its participation in the Earth Summit, WorldWIDE Network organized an all-day workshop at the Global Forum of NGOs in Rio de Janeiro on "Women's Voices on Community Action for Environmental Management." The workshop brought together women environmental managers to identify common concerns and explore common, workable approaches.

In the coming months, WorldWIDE plans to expand its global network by strengthening local chapters and affiliates of WorldWIDE Forums. The purpose of these Forums is to nurture women's participation at all levels, especially at the grassroot, and to encourage local dialogue on issues concerning women, environment and development.

WorldWIDE Network believes that its activities will help speed women's effective participation in environmental management in their own communities all over the world. It also envisions that local WorldWIDE Forums will strengthen national networks as well as lay the groundwork for coordination of National Assemblies of Women and the Environment, bringing together women who have designed or managed successful environmental projects in their countries.

Women, Environment and Development Network (WEDNET)

Environment Liaison
Centre International (ELCI)
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562 022, 562 172
Fax: 562 175

Women, Environment and Development Network (WEDNET) is an innovative research and information-sharing project of the Environment Liaison Centre International (ELCI). It is financially supported by the International Development Research Centre (IDRC) through the Gender and Development Unit (GAD). The project was launched with a meeting in Nyeri, Kenya in June, 1989 which brought together researchers and communication specialists to work out common methodological

approaches for research and modalities for sharing information.

WEDNET has three interlinked components. Its primary focus is a multinational, multi-disciplinary research project on "Women and Natural Resource Management in Africa." A total of 17 researchers in eight African countries are involved in 10 research projects, using a common framework of investigation which sees the poverty of African women as the result of global and regional policies that force them to transfer their own difficulties onto the environment at the long-term cost of their subsistence. The project seeks to break the isolation of researchers, especially women, who are working on gender and environmental management; to develop a network of concerned researchers and grass-roots groups as an integral part of the research on women's knowledge and roles in natural resource management; to promote research on strategies for coping with environmental degradation and for sustainable resource management; to forge collaborative links between researchers, policymakers and NGOs involved in enhancing the sustainability of the resource base; and to produce a set of policy recommendations for more effective resource management which take into account women's insights and experiences.

A second component endeavours to link researchers in a computerized network for purposes of information sharing and resource input. The third component is a spinoff of the main research and information-sharing activities, in which effective means are being developed to com-municate relevant recommendations to policy-makers, NGOs and grass-roots women's groups.

WEDNET publishes a newsletter (WEDNEWS) as an ongoing source of information on activities within the project and from the wider development community.

Karachi Administrative Women Welfare Society (KAWWS)

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Karachi Administrative Women Welfare Society (KAWWS) is a women's pressure group to activate civic agencies for urban development, with special emphasis on the creation and maintenance of a pollution-free environment as a prerequisite for a Healthy life for families, especially women and children. Major areas of KAWWS activities are sanitation, roadbuilding, electrification, provision of sewage facilities, construction of parks and playgrounds, potable water, construction of embankment walls for open storm-water drains, construction of low-cost routes for pedestrians and light vehicular traffic as an alternative to expensive flyover bridges.

KAWWS is an answer to an almost total lack of civic amenities which existed in the living unit called Karachi Administration Employees Cooperative Housing Society (KAECHS). KAECHS was established 35 years ago just south of Karachi, and has a population of 65,000.

Women residents, long fed up with the slum-like conditions, realized that a pooling of woman power was what was needed to persuade various

civic agencies to provide the services for which taxpayers were paying them. KAWWS took on the responsibility of tracing and following relevant files in different departments, reminding officers to take necessary actions on time, monitoring approved development work, coordinating meeting among different committees and the departments working on projects such as embankment walls, and providing feedback on the progress of work.

The source of income to support these activities is the monthly contribution of its members. On the strength of this small contribution (roughly U.S. $5,000 over three years), KAWWS has been successful in making the relevant civic agencies spend more than U.S. $206,000 from 1988 to 1991.

KAWWS uses a conciliatory rather than a confrontational approach. It coordinates and facilitates activities among agencies and citizen groups and plays the role of motivator and adviser for other women's groups attempting to replicate projects. KAWWS creates awareness by arranging training workshops and lectures on health, sanitation and project management.

The long-term objectives of KAWWS are to replicate ongoing sustainable schemes to improve existing facilities in every block of KAECH Society and the six localities around it by 1996; to introduce the concept of public participation (with special emphasis on women's role) in creating a clean and healthy environment on a countrywide basis by the year 2000; to set up women's committees in every residential area to do development work on the pattern of KAWWS; and to work for decentralization, setting up smaller and more manageable municipalities and increasing women's representation in these new administrative units.

Participants at the WWSS Council Meeting, Rabat

Collaborative Council meets in Rabat, Morocco

The second meeting of the Collaborative Council for Water Supply and Sanitation was held in Rabat, Morocco, from 7 to 10 September, 1993. It was attended by 200 participants from the developing countries, non-governmental organizations, private sector, United Nations system, bilateral and donors.

The meeting was opened by the Minister of Public Works, Vocational Training and Managerial Staff Training, Morocco and Ms. Margaret Catley-Carlson, Chairperson.

During the meeting reports from the seven working groups were presented on: Country Level Collaboration; Urbanization; Operation and Maintenance; Applied Research; Information Management; Information, Education and Communication; and Gender Issues. New Issues were also discussed which focused on: Water-A Limit to Growth; Water Demand Management and Conservation; Promotion of Sanitation; Institutional and Management Options; Official Development Assistance and Political Advocacy; More Partners-Role for NGO's and Consumers; More Partners-Role for Professional Association and Role for Private Sector.

INSTRAW is the co-chair along with PROWWESS for the working group on gender issues. The *Sourcebook on Gender Issues* was presented which contains tools, guidelines and checklists on how-to include gender issues at the project level. It was recommended that the Sourcebook should be used in various projects, modified and adapted for various target needs. A follow-up will be the preparation of a Sourcebook aimed at policy and decision-making levels.

The Collaborative Council is Scheduled to meet again in 1995. INSTRAW was represented by Ms. Borjana Schieber, Social Affairs Officer.

STRESSES AND STORMS: *The case of Bangladesh*

(Continued from page 27)

migrating in search of wage income, women are working on family farms or as agricultural wage labourers.

Women are also increasingly seeking employment outside the home in the manufacturing industry. In 1985-86 women comprised 35% of the total employees in this sector.

Nonetheless, most women are not considered economically active as their work in the home is ignored, even though they have sole responsibility for cooking, collecting food, fuel and water, and cleaning. In 1983-84 Labour Force Survey, only 8.9% of women were listed in the labour force and for men the figure was 91%.

Men outnumber women in Bangladesh, a reflection of the additional hardships faced by poor women and girls. Malnutrition, which affects three-quarter of rural households (most of whom consume just half their bodily requirements), is most serious among women and girls, who are systematically discriminated against in the allocation of food within the family. A typical Bangladeshi girl receives some 20% fewer calories per day than her brother and is more likely to be malnourished. Female mortality is higher than male in Bangladesh for most age groups. In fact, Bangladesh is one of only four countries where more girls than boys die before the age of five.

The Constitution, which came into effect in 1972 after independence, grants equal rights to women in all spheres of life. Women, for example, have the right to vote; thirty seats in the 330-member parliament are reserved for women and there is a 10% quota for women in government services jobs. The latter quota, however, is hardly fulfilled.

Women in development in Bangladesh

From an institutional point of view, Bangladesh was at the forefront of the developing world when the Women's Affairs Division of the President's Secretariat was upgraded into a full-fledged Ministry of Women's Affairs. Subsequently, however, the Ministry was merged with the Ministry of Social Welfare to form the Ministry of Social Welfare and Women's Affairs. By 1989 a separate Ministry of Women's Affairs was split and with the Ministry of Planning it is responsible for promoting greater participation of women in development activities.

The government has been committed to increasing women's participation in order to promote economic development as well as the need for social welfare. In the Third Five Year Plan (1986-1990) this was stated as: "To ensure a balanced socio-economic growth... equal participation of women is an absolute necessity." The plan allocated funds for women's programmes in various ministries and other funds for programmes of the Directorate of Women's Affairs. Most ministries, including agriculture, education, health, land reform, among others, had a women in development component and supported such programmes as the GRAMEEN Bank, Women's Cooperatives Integrated Rural Development Programme, among others.

In the Fourth Five Year Plan (1991-1995) there is a separate chapter on women and each sector chapter contains a section on women. In this plan women are to be mainstreamed and not just treated in social welfare terms. In addition, women's issues are to be addressed in all appropriate economic development projects. Specific efforts are planned to be made in agriculture, environment and natural resources, industry and trade, government services and the social sector. (World Bank 1990.)

Following independence in 1971, foreign donors, in cooperation with local NGOs launched a number of programmes to rehabilitate war-abused, widowed and displaced women. NGO programmes have been important ever since and in 1985 there were 627 NGOs dealing with women registered with the Directorate of Women's Affairs. Programmes focused mainly on income-generating activities, credit, adult literacy, legal education, child care and family planning aimed both to landless poor as well as lower middle class. Recently, however, with the growing concern about environmental issues at the international level, NGOs are addressing environmental issues and involving women in them.

Multilateral agencies and bilateral organizations have also had programmes for women. Most of these were related to child care and family planning, adult literacy and vocational training, although more and more environmental issues are becoming the focus of many of these programmes.

The World Bank is involved in institutional capacity building as well as water, forest and energy management. Other multilateral agencies include the Asian Development Bank and various United Nations programmes. The World Food Programme promotes social/agro-forestry through 19 NGOs by giving food aid to the poor, especially rural women in exchange for planting tress.

Women's movement

The early 1970s brought a growing awareness and concern about the low status of women in Bangladesh as elsewhere. During that decade, the Government of Bangladesh showed concern about the condition of women. In its effort to make effective policies for the welfare of women, however, it felt hampered by lack of knowledge about the actual situation. Some women also felt the need to document both the real condition of women in Bangladesh and the growing demand for an improvement in their situation.

Professional women of diverse disciplines began to carry out research and to use it to raise women's awareness of their situation and to mobilize them to seek change. NGOs such as WOMEN FOR WOMEN and the Unnayan Bikalper Nitinirdharani Gobeshona (UBING) have conducted research and advocacy on women's issues. They have not, however, established effective cooperation with the Government.

Many women's NGOs have also assisted women in group formation and mobilization. They have also been instrumental in advocacy and awareness raising and in providing direct assistance to poor women.

The Nijera Kori ("Do it Ourselves"), for example, is an NGO which organizes landless men and women against shrimp cultivation. Its coordinator, a woman who graduated in fine arts from Dhaka University and worked with rural women all her life, has been particularly sensitive to women's needs and potentials. The organization fosters the idea that development can be sustainable only with the participation of the majority of people in decision making, implementation of development programmes, monitoring and evaluation and the equal sharing of the benefits of development. It has also emphasized the need to ensure women's equal participation at all levels. The principal activities of the organization are group formation, conscientization and training, legal aid, land reform action and economic activities. Other women's NGOs, such as Learning to Survive, Women's Council, Women's Self-reliant Group, carry out similar efforts.

The National Women's

Action Programme Formulation and Implementation Committee was formed to act as a pressure group in implementing the recommendations of a national seminar that was held in 1986 on the role and problems of women in the socio-economic development of the country. While providing assistance for project implementation through other NGOs, the Committee hoped to serve as adviser or consultant to the government on affairs concerning women and development. This however did not materialize as the government established its own organization, the Sangstha, for implementing the policies and programmes of the government regarding women (ESCAP 1989. Case Studies on Strengthening Co-ordination between Non-Governmental Organizations and Government Agencies in Promoting Social Development).

Natural resources are central to the livelihoods of poor rural households and it is the women who are responsible for processing and to a lesser but increasing extent growing agricultural products, raising poultry and caring for cows and goats, collecting medicinal herbs, spices, fuel, water and fodder and preserving food and making handicrafts. Women then are the key environmental managers, with profound knowledge of the plants, animals and ecological processes with which they are intimately involved.

Because of this near-total dependence on the environment, it is the poorest Bangladeshis, especially women, who are most further in search of firewood in deforested areas. Poor women often have no choice but to exploit natural resources in order to survive, even though they may have knowledge to promote sustainability.

It is therefore not surprising that because of their leadership and organizing abilities poor women have been active environmentalists although they might not see themselves as such.

In preparation for UNCED some attempts were made to involve women in environmental discussions and to hear their recommendations. Such was the case of the National Peasant Women's Summit on Environment which was organized by the Association of Development Agencies of Bangladesh (ADAB) and UNIFEM.

Their actions have been in response to exploitative social situations in which their livelihood and dependence on natural resources have been threatened.

At the grass-roots level, women have been concerned about environmental issues in so far as they affect their livelihood. With new structural adjustment and export oriented policies, coastal areas are taken over by shrimp growers, who breach the sea dikes and flood acres of cultivable land with saline water. Some landlords have leased state-owned wetlands, forest and other areas and flooded these with saline water. The adjacent lands are also affected.

Commercial shrimp cultivation has serious environmental impacts. This cultivation is conducted under conditions of artificially induced water logging and salinity, providing a very peculiar kind of "flooding" found in the southern coastal areas of Bangladesh. Shrimp cultivation requires holding of stagnant saline water throughout the year over large tracts of land. There were reports of rich and influential men deliberately breaching sea/river dikes in order to inundate their shrimp farms with tidal inflows — even though such actions have adverse effects on the crop

production of others in the adjacent fields because of the resultant salinity. Enhanced salinity causes loss of vegetation making surrounding arable land barren. This artificial flooding of arable land by rich and powerful people to increase their own profits at the expense of the entire community (destroying common resources) is aggravating the existing conflicts between poor peasants and rich businessmen.

The effects of shrimp cultivation on the livelihood of the local population are devastating. It has diminished agricultural and livestock production due to the salinization of the soil. Likewise, fishing has been affected as forty percent of the coastal mangrove forest has been cut by the shrimp growers. Coastal areas, both mangrove forest and agricultural lands, previously a source of subsistence to local populations, are being converted into salt deserts. It has lead to a shortage of drinking water and fuel and there has been an increase of water borne diseases due to the vicinity of stagnant waters of the shrimp ponds.

The introduction of shrimp cultivation has also had social repercussions. Rich shrimp growers are intimidating local population, filing false cases against local male leaders and putting them in prison. Hired goons attack and burn villages and assault women and children. Goons have introduced drugs, alcohol and gambling.

Women and children work as fry/shrimp catchers and processors and children often do not go to school attracted by the wages. Women stay in cold/salty water mixed with lime for 8-10 hours each day — causing physical damage, heart attacks and diseases.

Peasants in the area have reacted to this situation. They have formed groups to protect the embankments which were built in the 1960s to protect lives and property from floods, salinity and cyclones, and to boost agricultural production. Women have been at the forefront of these mobilizations. In 1990 one incident received national attention when a local businessman and his hired hoodlums equipped with firearms tried to breach the river-side embankments to let saline water into a piece of land which he somehow managed to possess under lease agreement for shrimp cultivation against the choice of the local people. In the face of strong resistance from the villagers the hoodlums opened fire and hurled bombs. One woman, Karuna Sardar, member of a landless peasant organization, was killed and 50 women and men were severely injured. Her body was taken away by the attackers and never found. Villagers have built a memorial on the spot.

It is NGOs who are most involved in environmental action

Organized women groups have been instrumental in mobilizing public opinion on environmental issues. In 1989 a ship was attempting to dump toxic and nuclear wastes into the Bay of Bengal. In addition, a proposed manufacturing plant based on imported toxic waste threatened public health and environment in Bangladesh. In an attempt to put a stop to this situation, a Bangladesh women's activist group mobilized other individuals and organizations and succeeded in cancelling the industrial waste-based plant and in avoiding toxic waste dumping by the ship. The ad hoc group was later constituted into the Environment Protection Committee which continues to operate with a wider mandate on environmental matters.

Addressing the problems: institutions

Government — At the official level, environmental concerns have gained considerable attention in recent years in Bangladesh. In 1987 the government constituted a National Conservation Strategy Task Force and in 1989 a separate environmental ministry. It has also signed a number of international conventions on the environment and the recent Five Year Plan (1990-1995) emphasizes environmental factors and ecological principles. Finally, in 1990 the government formed a commission on National Environmental Management Action Plan that is to formulate an action agenda on environment for the country. So far, however, these efforts have had little impact. Institutional mechanisms are weak, inadequately coordinated and underfunded.

The Forest Department is responsible for protecting and managing all state-owned forests. An attempt was made to raise the acreage of forested land between 1973 and 1985, but the effort failed due to inappropriate selection of tree species, the inability of the department to protect new planting, and failure to involve local people in plantation management or to give them access to forest products.

The government is currently implementing "social forestry" programmes in over one million hectares of state-owned land, giving local people the opportunity and incentive to maintain local forests. These programmes provide employment for the rural poor, especially women, in planting, nursery development and husbanding trees; and they add to the stock of much-needed biomass for fuel, fodder and building materials. The "Betagi" project in Chittagong has used landless groups to forest barren land and is a tremendous success.

There has been valuable efforts on the part of some women to influence policies and to raise awareness of the need to include women in environmental projects. One example is Hasna Moudud who participated in the Global Assembly of Women and the Environment (Miami, November 1991). In 1986, Ms Moudud was elected to the Bangladesh Parliament by a coastal constituency. She founded the Coastal Area Resource Development and Management Association (CARDMA), which brought together members of Parliament from coastal areas, experts and scientists. Led by Moudud, the Parliamentary members of CARDMA lobbied the legislature to raise the general level of consciousness about conservation and the value of involving women in environmental management. A Special Committee on Environment and Coastal Development was subsequently formed. The role of women as natural and traditional conservationists was highlighted, and women were included in the coastal afforestation programme. In addition, Moudud initiated a proposal to give land jointly to husband and wife and to female heads of households under the programme of distribution of government land to landless peasants. When the Government adopted this proposal, women's status improved and land "grabbing" declined and women began planting trees and growing vegetables. Moudud is no longer a member of parliament but remains the chairperson of CARDMA and the National Association for Resource Improvement (NARI).

NGOs: It is non-governmental organizations who are most involved in the environmental action. Some 600 are registered as members of the Association of Development

Agencies in Bangladesh (ADAB). 40% of these are international, 38% national and 22% local. In the past, environment and conservation had not been explicitly mentioned in the policy/strategy documents of the development NGOs in Bangladesh, but many components of their activities had direct or indirect positive impact on the environment and conservation of resources at the household, community and regional level. Recently, however, some NGOs are explicitly including environment into their development programmes.

There are about 100 NGOs engaged in social, community or homestead forestry activities. With considerable experience in social forestry, they run programmes of tree planting, afforestation and forest protection in response to shortages of fuel, timber and construction supplies and as part of their poverty alleviation strategies. Participatory forestry projects are generally implemented in the form of strip plantation along roads, embankment shoulders, pond banks, homesteads, marginal lands, state lands, forestlands and on the fallow lands of educational and religious institutions.

Plantings are mainly of fast-growing multipurpose trees, planted primarily by landless farmers and women, who receive five kilograms of wheat per day for three years plus 30% of the final product in return for planting and protecting 500 trees.

To bring about a significant change women must play leadership roles

Non-governmental organizations are also involved in forest protection and other environmental efforts, nursery programmes, agriculture and fishery. They have made credit, employment and income-generating opportunities available to the landless poor, especially women and are involved in health, nutrition, family planning, hygiene and sanitation. The involvement of a number of professional and gender sensitive women in these organizations has helped include women into their programmes.

National Association for Resource Improvement (NARI) has encouraged women in the coastal area of Noakhali to plant trees along roadsides and embankments and has urged local authorities to integrate women into the coastal afforestation programme. NARI has also helped coastal area women earn income from grass mat sales. Women in the area weave and sell these mats, but competition from plastic mats was limiting their sales and the women were not making any money. NARI has helped the women by designing the mats, marketing them in Dhaka and exporting them to Japan. The middle-aged women and their daughters who have participated have earned additional income, and the project has increased awareness of the critical links between women and the environment. Moudud believes that to bring about any significant change in the environment, women must play leadership roles at the national and international level. She is now working to involve more women in the highest decision and policy-making levels and to help gain the global exposure, training and access to information needed for women to be effective managers of natural resources locally and globally.

But even these projects, which operate in nearly three-quarters of the country's local administrative units *(upazilas)*, are reaching fewer than a fifth of all villages and only 1% of the landless population who are the main target of NGO efforts.

Drought in Upper Volta

BEATING BACK THE DESERT: *The case of Burkina Faso*

Introduction

Land-locked Burkina Faso is one of the world's ten poorest countries. Like the other countries of the Sudano-Sahel region, Burkina has a harsh climate with uneven rainfall distribution and insufficient control over water, half of which streams outside its borders. Droughts (defined as two or more years during which rainfall is much lower than average) are regular events, and each is successively more devastating as growing numbers of poor Burkinabes seek to survive on a decreasing amount of productive land.

Burkina's population of nearly 9 million continues to grow at the staggering rate of 3.5% per year. All but 5% live in arid or semi-arid areas — those least capable of sustaining such a population— since the better-quality soils are located in valleys which have always been plagued by endemic diseases. The desert is expanding, most noticeably in the north of the country. Overfarming and overgrazing have caused massive erosion, shrinking the amount of productive land and reducing the fertility of what remains,

and food shortages are chronic even in non-drought years. Nevertheless, 90% percent of the population is rural and makes its living by subsistence farming. Burkina produces 85% of its own food and imports the rest.

Burkina has only limited forested areas, and they are rapidly disappearing. Abusive wood-cutting has decimated out an estimated 50,000 hectares of forested land per year, as too many families search for wood for fuel, building supplies and extra income. Deforestation and the erosion it causes further add to the problem of the creeping desert, contributing to the "death of the bush" and the disappearance of vast stocks of the regions's typical species.

The great droughts of 1973-74 and 1983-84 made all of this worse. Widespread famine and the mass migration of men from the countryside resulted, leaving women behind to cope —often for indefinite periods— and contributing to a chaotic pattern of urbanization. Pollution and unsanitary living conditions have become endemic in Burkina's growing cities.

It is the poor who suffer most from Burkina's environmental troubles and who are forced to compound them in order to survive during times of drought. People will denude the land of vegetative cover rather than starve, even if this means condemning additional acreage to the creeping desert over the longer term. And women will continue to bear many children to help with the massive amount of work necessary to eke out a living from an increasingly inhospitable terrain, another

This article is based on the study prepared for INSTRAW by Lalla Racine Sanou.

survival strategy that places additional stress on an overtaxed ecosystem. The majority of Burkina's population today is between 15 and 25 years of age.

Women, environment and development in Burkina Faso

Like women in most of sub-Saharan Africa, Burkinabe women are the main producers of food for their families, working 14-16 hours days at growing, processing and preserving food, caring for livestock, and gathering fuel, fodder and other biomass products in addition to labouring in their husbands' cash crop fields.

Burkina's environmental woes have dramatically increased women's workload, forcing them to travel farther for water, food and fuel and to labour more to extract less from exhausted soil. Nearly a quarter of Burkinabe women who die between 15 and 44 succumb to malnutrition, anaemia, repeated pregnancies, malaria or overexertion, according to a 1987 UNICEF report. Women get little help from modern technology because they do not hold title to the land they work and are therefore excluded from access to training, credit and other inputs. When their husbands leave home in search of work, as they have always done seasonally, they now frequently do not return for extended periods. Women are left to handle all the work the men usually do, in addition to somehow finding income to buy what they cannot produce or gather themselves. In such situations they almost inevitably grow poorer, spending longer and longer hours on basic survival that requires an ever-growing amount of unremunerated work.

Available literature in Burkina Faso on women, environment and development is limited and unspecialized, addressing broad issues like the status of women and improvement of their living conditions (alleviation of tasks, access to means of production, income-generating activities, education, training, information, sanitation), and access to planning and decision-making — that have been circulating in the international community for the last two decades. Experiments carried out to date that focus on rural women in their daily lives have generally been carried out by non-governmental organizations (NGOs) who have little experience in collecting, organizing or disseminating information.

Work has been done that recognizes the vital role women in the West African Sahel play in the management of resources. It has been found that women provide 60-80% of the work force on anti-desertification project sites. Women play a major role in carrying out many of the simple, traditional techniques used for water and soil conservation which help slow down the speed of surface water so that it can be absorbed by the soil. These include the building of small earth or stone dikes, for which women carry the building stones; hill-making (practiced in the Comoe) for sealing in humidity; "zai", or planting seeds in a hole bored in the hard ground to soften it (used in the Yatenga). Women plant windbreaks and hedges, practice selective woodcutting to encourage regeneration, are

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responsible for water collection; plant and harvest on collective and private fields (especially when the men are away), and are knowledgeable about medicinal uses of certain plants, which encourages their multiplication and discourages abusive wood-cutting.

Women face environmental and socio-economic constraints that prevent them from participating more fully in natural resource management projects: their already overwhelming workload due to the mass exodus of men, a 93% illiteracy rate among women 15 to 24 (compared with 78% of men) and grinding poverty. Customary property laws are an additional problem limiting the effectiveness of agrarian reforms: although all land in Burkina Faso today is officially the property of the State, this is not recognized in rural communities where traditional male land tenure rights are observed, even where women perform all the labour because the men are away.

Grassroots groups

Traditional organizations — peasant associations like the Naam groups, village groups or producers organizations, and cooperatives— are very developed in Burkina Faso, as they are in many of the Sahelian countries. A few of these are specifically women's associations, such as Pag-la-Yiri in ZABRE, "AFZ", which was established by women as a private association, has 10,000 members and is active in over 110 villages in setting up cereal banks, village pharmacies and other projects. Another association is the "Long Live the Peasant" AVLP Association in Sapone, Bazega. With 1000 members, this association has 42 women's groups active in health issues, the environment and agriculture.

However, although several such groups of women have been created, very few associations were set up on the initiative of women themselves, and those that exist are often less dynamic than those founded and run by men. Obstacles to women's full participation at this level may be partially explained by low literacy. Nevertheless, some of these associations focus on development and the organization of women in the fight against the effects of drought, and their existence represents a powerful development level.

Women and development: national efforts

Burkina Faso has focused its development goals on food security, water management and the fight against desertification, with the hope of making the country self-sufficient in food by the year 2000. The 1986-1990 development plan also gave priority to the socio-economic promotion of women and officially listed them as development agents, recognizing the critical role women must play if the fight for rural development and the spreading of the desert are to be successful.

The current Five-year Plan and Structural Adjustment Programme with the support of the World Bank and IMF, are intended to lay the groundwork for sustainable development, with attention to boosting agricultural production in an environmentally sound fashion, containing inflation, and encouraging private investment and job creation. Plans to integrate women into this programme as laid out at a seminar in Koudougou in June 1991, focus on agriculture and livestock raising, commerce, crafts, health, education, training, environment and water. Specific objectives with respect to the socio-economic status of women are to promote women's activities on the farm; improve their quality of life, increase women's production

through the use of new techniques and, by so doing, raise their incomes; and to stimulate their self-promotion through groups (as defined by a group of consultants who have analysed eight development projects begun in 1991). What is essential in all of this is that living conditions, productivity increases and environmental management are connected: improvements in each require improvements in the other two.

Women are involved in government programmes to develop and rehabilitate forests, manage pasturelands and cultivate domestic sources of energy. As part of the National Programme of Village Forestry, for example, more than 30,000 women were trained in construction methods for new stoves that require a reduced use of firewood.

However, the firewood problem will not be solved until it is given consideration within a broader environmental management view; and so far, individual projects have been insufficiently integrated, producing isolated sets of results in each sector that have only limited significance. They are inadequately publicized, often fail to take account of factors that blunt their impact (such as customary land tenure laws and land-use conflicts between ranchers and farmers). A three-pronged programme to fight desertification launched in 1986, for example, sets stringent controls on the cutting and selling of firewood, the grazing of animals and the lighting of brush fires; but penalties for violations are not being enforced. Fully integrating women into forestry programmes would mean

involving them in all forestry development actions, which in turn would require overcoming strong male resistance to such a change in women's roles.

Despite the sectoral approach adopted, the government has determined priorities for intervention and has created and interministerial organ as part of the Ministry of Planning and Cooperation in an appreciable attempt to integrate different areas of action.

The period following the United Nations Decade for women has been characterized by a proliferation of dispersed and anarchic interventions for the benefit of women, which has led to a waste of funds and effort due to lack of a coordinated national strategy. Women in rural areas, who should be the real beneficiaries of such efforts, have been affected only insignificantly.

With the aid of regional and international organizations, NGOs have been very active in Burkina Faso, focusing on the fight against desertification. Even at this level, however, actions undertaken for the benefit of women center on lightening the burden of household tasks, improving heath care for mothers and children, and traditional income-generating activities, rather than on improving conditions for women's participation in the management of natural resources. The unavoidable link between environmental poverty and women's poverty has not yet been established, and the present fad of developers for the creation of income-generating activities, cut off from the wider environmental context in which women operate, will never lead to more than partial solutions.

The unavoidable link between environmental poverty and women's poverty has not been established

Additional steps for avancing the women and development connection are still in the theoretical stage: multiplication of NGOs, the beginning of the creation of women's banks and numerous training sessions for women.

The collapse in the socio-ecological balance has endangered sustainable development in all of the countries of the Sahel, who have united in the Inter-States Committee for the Fight Against Drought in the Sahel (CILSS is the French acronym) to consider "man (sic), economy, ecology" as the necessary three-part background for any action to be taken on food security, natural resource management and general improvement in living conditions.

The CILSS was created after the drought of 1973/74. Its mandate is to search for solutions relating to overall problems that impede food self-sufficiency and a better socio-ecological balance in the Sahel, the promotion of cooperation towards these ends among the states of the region and the mobilization of resources to fund regional programmes. The Sahel Club, which includes the states of the region plus major OECD aid providers, was founded in 1976 to support the CILSS. Projects undertaken between 1976 and 1982 focused on the urgent food and project aid to alleviate the immediate crisis created by the drought. These were followed by a revised strategy to fight drought and desert-spreading, focusing on Mindelo (food security) and N'Djamena (population policies).

The 1989 CILSS soil management meeting at Segou assembled all the development

Agricultural development projects in Burkina Faso
Photo UN/DPI/ISSC

partners: the states of the region, rural organizations and aid providers. It highlighted the success of grassroot projects involving women in the daily manage ment of natural resources. Through that effort, the connection between women, environment and development became a priority for all states in the region in their fight against the spreading of the desert.

Since then, states in the region have the need to reorient development plans to meet the specific needs of women living in the Sahel. The Segou meeting emphasized the critical role of NGOs and peasant associations (local grassroots initiatives), the crucial role of women, the need for decentralized project management and participation of local populations, the importance of local investment and savings, and information and training.

To date, however, the CILSS member states have individual and separate approaches to the women in development dimension, approaches that vary according to which department is to be involved in a specific project or to lender concerns. The goals of the Segou meeting are still theoretical and project benefits are by and large still failing to reach target populations.

The CILSS is working to establish a specifically Sahelian methodology of project evaluation that breaks away from the classic profitability criteria. It is based on a multi-criteria approach that includes values not easily calculated in monetary terms and which therefore are better adapted to identifying the extent of women's participation in natural resource management than traditional monetary measures.

The UN and other international actors

The United Nations has been active in fighting drought and desertification, creating a Special Sahel Office under the auspices of the Economic and Social Council to work with the CILSS in order to coordinate UN assistance activities. This office became the Office for the Soudano-Sahelian Region following the 1977 world conference on the spreading of the desert in Nairobi. It provides support to national and regional institutions in planning and design of projects and programmes to fight against the effects of drought and desertification. The United Nations Environment Programme, the Food and Agriculture Organization are also involved in the region, as are international NGOs like the International Union for the Conservation of Nature and its Resources; and the World Wildlife Fund.

Conclusions

The importance of the role of women and the barriers to improving their status have been officially recognized by the conclusions and recommendations of national

and regional research programmes, seminars and workshops. Women as producers: are important actors in the development process. Development organizations, however, tend to see them as victims and actors in the degradation of the environment.

Women have been able to organize themselves in groups over the past few years on projects like water and soil conservation and market gardening. The institutional framework at both the national and regional level is well structured, but there is still insufficient coordination among research institutions, projects and programmes. International research structures on women remain cut off from the practical realities facing Sahelian women.

Meeting after meeting on Sahelian problems has identified the Sahelian woman's capabilities and importance, but in practice very little has come out of this. It is, nevertheless, an indispensable step toward a solution in the Sahel.

For women to benefit from services, researchers and developers need to deepen their knowledge of the physical and human environment of Burkina Faso, farming methods and traditional natural resource management methods and women's real concerns and occupations. Particular emphasis should be placed on women's sensitivity concerning their integration in the conception, as well as the implementation of natural resource management measures, and to appropriate methods for training and information dissemination.

Integrating women into forestry programmes would mean involving them in all forestry development actions, which would require overcoming male resistance

It is regretable that all the institutions created to help the socio-economic promotion of women are in developed countries-or, in any case, far from the realities of the Sahelian woman. Large investments have been made for the promotion of women, but unfortunately their impact is minimal in terms of the improvement of women's living conditions. Projects must do a better job of integrating women in environmental management, finding approaches that fit with their style as well as appropriate methods to encourage their cooperation. Particular emphasis should also be placed on training women in environmental disciplines in universities.

PROBLEMS IN PARADISE: *The case of Tahiti*

French Polynesia is a chain of 130 islands spread over five archipelagos in the South Pacific (the Society Islands, where Tahiti Island is located, the Marquesas, the Tuamotu, Gambier and Austral).

Early visits by Europeans resulted in the extermination of most islanders, as a result of armed confrontations, alcoholism and disease. Thirty years after the discovery of the islands, there remained only one-tenth of the original population.

The original French conception for the islands, transforming the Marquesas archipelago into a penal colony, was abandoned because of the expense and difficulty of transporting prisoners. Tahiti, the largest of the islands, had few valuable natural resources either on land or sea and extremely limited amount of cultivable land. It therefore attracted no settlers.

After World War II, French Polynesia became an Overseas Territory officially and shortly after 1962 the Moruroa atoll became a testing site for nuclear bombs despite the opposition of the 30 elected members of the

Territorial Assembly, French Polynesia's local parliament.

In 1966 atmospheric testings were begun. Due to the risks involved in this kind of testing and the opposition raised by the local population, the decision was taken in the early 1970s to carry out underground rather than atmospheric testing.

There are reports, however, that both atmospheric and underground testing have had a devastating effect on both the local population and the environment. Women, it is reported, are heavily affected by the resulting health problems, because in addition to suffering from the usual symptoms, of diarrhoea, vomiting, loss of appetite and aching of the bodies, they have also the responsibility of caring for the sick. Radiation-linked leukaemia and various cancers and the deformation and retardation of children are some of the long-term effects attributed to the testings. Although the effect on plants and animals is less well-documented, a few articles and books list nuclear radiation and nuclear dumping as causes of coral destruction. This results in a loss of species as well as an important source of protein and raw materials for the islanders. Compounded by weakened health, as the main harvesters of marine resources in the Pacific, women have to expend more time and energy in search of protein sources for their families.

Not surprisingly and as the Tahitian case study illustrates, the women's movement as in the entire Pacific region, has

been closely related to anti-nuclear and anti-colonial protests.

Populations from the social effects of migration

Soon after the decision to make the islands of French Polynesia a site for nuclear testing, 18,000 troops were dispatched to Tahiti. The population of Tahiti doubled overnight with the arrival of military personnel. Its population continued to expand as the poor from isolated parts of the islands were recruited as workers to build the infrastructure needed for the testing. These workers brought their families to Papeete, which was soon surrounded by slums. Most of them remained after the work was completed around 1970.

The growing population led to steadily increasing immigration by others who recognized that there was now money to be made selling goods and services in Papeete. Today, the number of immigrants has reached almost 30,000, or one-sixth of the Territory's total population. The Territory's Administration expanded to govern the now populous islands. Many administrators stay in Tahiti after they retire, further adding to the island's overcrowding. Over 70% of French Polynesia's population lives there today.

The testing programme in the islands has led to a massive inflow of funds over the years — now about one billion dollars a year— which pays for roads, schools, hospitals and social welfare programmes as well as military expenses. Per capita income in the Territory, at almost $8,000, outstrips that of all its Pacific neighbours, but it is an economy entirely dependent on French subsidies. Before testing began, the islands could nearly balance their trade budget, with exports covering about 70% of imports at the beginning of the 1960s. By the end of the decade, this figure had dropped to under 10% where it has remained since as traditional ways of making a living like vanilla and coffee production have been all but abandoned. French Polynesia today must import 85% of its food needs.

The high per capita income is also misleading, because there are serious inequities in French Polynesian society. Unemployment is high —about 40% among young people— and although welfare benefits are good, the economic situation has been deteriorating since 1987.

The Tahitian population has suffered most. The whole legal system is French, and, lacking legally valid ownership documents, many Tahitians have been deprived of their ancestral lands, creating a series of severe social dislocations. Most families today rent small plots of land, on which they must live in small corrugated iron and masonite shacks. There is no space for parents or other elderly relatives, who traditionally were cared for by their adult children. The crowded conditions also persuade numerous teenagers to leave home. With few prospects for employment, many join gangs of juvenile delinquents; Papeet's slums are plagued by crime and prostitution. Without a garden for growing traditional food as taro tubers, sweet

Marie-Thérèse Danielson

was born in France, but has lived most of her life in French Polynesia where she has been active in local politics, women's organizations and associations for the protection of nature. She has co-authored numerous articles and books with her husband on nuclear testing in French Polynesia.

potatoes, bananas and breadfruit, most adult Tahitians must buy all food in the trading stores, and consequently live on such food as bread, rice, macaroni, beans, sugar and canned meat; children eat snacks and sweets and drink imported beverages. The resulting general malnutrition is the main cause of the multiplication of diseases like diabetes, anaemia, angina and sores.

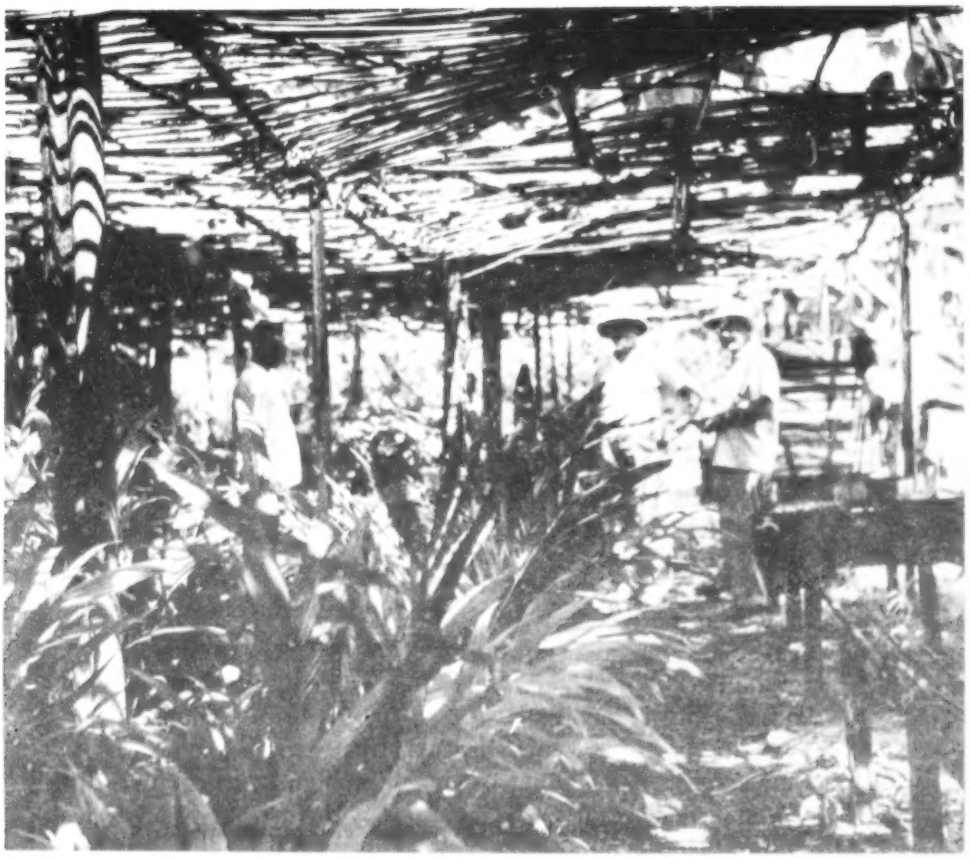
Overcrowding has also led to water pollution along the beaches running for 15 miles or so on either side of Papeete. To make room for the slums and mansions (which are often found side by side), the vegetation has been ruthlessly slashed and large-scale erosion has set in. All the loose topsoil, along with all the sewage and pesticides, flow into the lagoons, where an unwary tourist taking a swim is liable to contract a host of serious diseases, including typhus, poliomyelitis and hepatitis. The Territory's tourist trade has fallen of in recent years, in part because of the seriousness of its pollution problem.

The most serious health problem, however, is the steady increase, since the testing of atomic weapons began in 1966, of the three types of cancers caused by irradiation: leukaemia, thyroid infection and brain tumors. As in the Marshall Islands, where nuclear weapons were also tested, many pregnancies end in miscarriage and many children are born deformed.

The authorities deny the existence of many radiation-related health problems. Only occasional and incomplete health statistics are published, and access to hospital records or for independent surveys is not allowed. In the Mangareva Islands, located close to Moruroa and Fangataufa, the two atolls in the Tuamotu archipelago where the weapons are detonated, ciguatera fish poisoning has affected all 600 of the islands' inhabilitants. It is reported that, the lagoon fish have become toxic by feeding on microscopic algae of the dinoflagellate family, which multiply when the reef is damaged, as has happened since the testing began. Studies by Japanese ichthyologists show that only in the Marshall Islands and the Tuamotu archipelago is ciguatera poisoning a problem in the Pacific.

Despite widespread concern about the impact of nuclear testing in the island, the staunchest anti-nuclear and pro-independence groups have been small, attracting only 15-20% of votes. They hold only 10% of the seats in the Territorial Assembly, where they have been represented since 1986. A 1958 referendum on independence was soundly defeated by 64% of voters.

Tahitian women have suffered most from the Territory's economic dislocations and health problems. Never valued highly by their society, Polynesian women have no access to political or economic power, and have been treated since ancient times as second-class citizens. Viewed as unclean and inferior, they are not even permitted to eat the same food as the men nor in the same place. Traditional women's roles were to tend the family plots, collect foods like coconuts, mussels and eggs, gather fuel and prepare food, and work at making baskets, cloth and other crafts.



French Polynesian women stay home while their husbands are at work (for such low salaries that most of it goes for beer). With no professional training, Tahitian women can make a little money only by plaiting hats and mats, growing ornamental plants and baking cakes. Only the youngest and cleverest can fin jobs in the municipalities, school canteens or as waitresses and chambermaids in the hotels. Unfortunately, prostitution is the easiest way for a young, charming woman to earn a considerable amount of money.

The first association of women in French Polynesia, called Groupement de Solidarite des Femmes de Tahiti, was created in 1961. Its founders were practically all *demi* women, working for or with the Territorial administration. Their proclaimed aim was "to improve the living conditions of the women and children belonging to all local ethnic groups". This was mostly done in an old-fashioned charitable way and their main accomplishment was to establish a nursery in Pirae township.

It was not until 1975 that a truly representative and humanitarian movement of Polynesian women emerged, as a result of the first Pacific Women's Conference in Suva, Fiji, organized by women from the British or formerly British

Pacific islands who had participated in the first United Nations Women's Conference in Mexico City. Two delegates from the Polynesian nationalist parties attended. It was the first time that Tahitian women had met and dealt with women from the other Pacific islands, with their similar culture, social and economic problems. The participants established a Regional Pacific Women's Resource Centre (PWRC) in Suva to make sure Pacific women would be represented internationally on social, economic, environmental and legal issues and to ensure that information would be filtered back and local women's groups in all the Pacific islands mobilized.

On their return home, delegates from the Territory publicized the results of the conference, including the demand that the nuclear tests be stopped. They also began a local women's association to address the issues covered at the Suva conference.

With interruptions due to local political events, the women's group continued to meet and attract new members despite the disapproval of certain husbands, who feared that their wives' participation in women's rights and antinuclear causes might result in harassments for the whole family. Contacts with other women's movements in the Pacific convinced the group that the Copenhagen meeting in 1980, midway through the United Nations Decade for Women, was an important event. With the support of other Pacific movements and the International Women's Tribune, a delegation of five women was sent, none of whom had ever participated in a meeting of this size.

As it was the first time that a group from Tahiti had participated in an international women's forum, it was the first chance for participants from other countries to learn that opposition existed within the islands to nuclear testing. In turn, up until then the French Polynesian women had been totally unaware that there existed international associations fighting for the same causes as theirs. The delegation agreed to join the Women's International League for Peace and Freedom after their return home. Their association with a large international non-governmental organization (NGO) has made it possible for French Polynesian women not only to become better informed but also to make their local problems better known abroad.

For financial reasons, the activities of the PWRC in Suva were suspended three years after its creation. But as a result of the growing awareness of women's problems revealed by the United Nations Decade for Women, the governments of the Pacific region decided to transfer the PWRC to the site of the South Pacific Commission in Noumea, New Caledonia. It is now the Pacific Women's Bureau (PWB), with an English and French section — each, however, with very limited financial means. Since the end of the Decade for Women, the PWB has taken over the task of organizing regional meetings and conferences for women. Participants are mostly government officials and delegates from the official women's councils, representing the local NGOs.

Since 1981 there have been five conferences. At the December 1991 conference, recommendations dealing with the environment asked the governments and NGOs of the region to exert more pressure to stop nuclear testing and to eliminate nuclear waste in the region, to be conscious of the consequences of climatic changes and global warming on

the islands, and to be more aware of the dangers of drift-net fishing in the Pacific.

Environmental awareness

Because most books and pamphlets about the environment and economic development are in English, and because so little environmental information is published in French Polynesia, women in the Territory are not well informed about these subjects. Under the previous local Administration, one of the ministers handled environmental problems as a sideline and tried to make the population aware of such environmental problems as the destruction of the coral reefs and the pollution of lagoons by hotel and industrial developers. A House of Nature was also created, where a small number of government officials try to enforce a few fundamental laws to protect the environment and have encouraged local environmental groups to form a federation.

There are now several independent associations for the protection of the environment, whose members, both men and women, are very active but who have limited power and even more limited means. They have nevertheless managed with great skill during the past few years to persuade the newspapers to publish the communiques and declarations coming out of public meetings, protesting against projects to promote tourism that would have a negative impact on the environment. These have often encouraged participation in demonstrations and rallies.

Equally important and successful are the women's associations of the local churches, to which most Polynesians belong. Parishes have sections whose purpose is not only to teach religion and ethics but also to solve problems. Their recommendations are frequently adopted by annual synods and further publicized.

Editor's Note

Nuclear testing in French Polynesia was suspended for one year in April 1992 and with the end of the Cold War, the suspension is likely to be extended. While this may be welcome news for the ecology of the islands, it will spell hardship for many Polynesians, who have grown used to the standard of living subsidized by the French government and the 10,000 jobs the testing programme has provided.

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BOOK NOTES

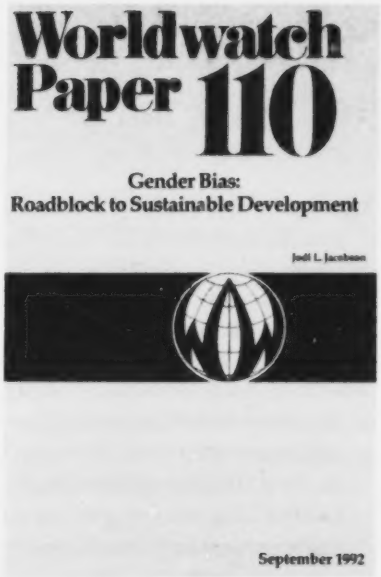
Recent publications on women, environment and development

Ecofeminism. Maria Mies and Vandana Shiva. Zed Books, London, 1993. 288 pp.

This book brings together the perspectives of women from North and South on the escalating deterioration of the environment. The authors draw on interviews with women to describe how they are responding to ecological threats. They ask whether women involved in environmental movements see a relationship between patriarchal oppression of women and the destruction of nature. They explore areas where conventional theories have not provided adequate answers, and, in so doing, criticize prevailing economic theories, liberal feminism, the notion of development, the philosophical foundations of modern science, and the omission of ethics in discussions of advances in reproductive and biotechnology.

Mies and Shiva developed an ecofeminist perspective grounded in the necessities of everyday life. They argue for the acceptance of limits and reciprocity, a rejection of exploitation and the commoditization of needs, and a commitment to a new ethic which includes an economy aimed at preserving self-sustaining life systems.

Gender Bias: Roadblock to Sustainable Development. Jodi L. Jacobson. Worldwatch Paper 110, Worldwatch Institute. Washington, D.C., September 1992. 60 pp., ISBN 1-878071-10-6 English.



This monograph places the failure of governments and developers to make improving the status of women a priority at the centre of the vicious circle created by deteriorating environmental quality, poverty, rapid population growth and the failure to achieve sustainable development. Jacobson views gender bias as a primary cause of poverty: it is women who are responsible for the survival of their families, through activities that are consistently discounted because they do not generate cash. Without that cash, or control over other status-conferring assets like land, women are deprived of the means ever to escape from poverty: education, health care, credit, technology. In such circumstances, children remain a source of status, economic security and labour, and rapid population growth continues, compounding environmental stresses.

Even in countries that succeed in promoting economic growth, gender bias prevents women from sharing in the prosperity unless specific steps are taken to redress inequities. A rise in a man's income does not usually translate into a rise for a woman; frequently, advances mean longer hours, harder work, poorer health, and an increase in overall security.

Quick fixes, such as curtailing birth rates and improving women's health, will never work because they do not address the underlying cause, Jacobson argues. The bottom line is that "the eroding status of low-income women in developing countries is a baseline indicator of human progress. Ignoring this issue is not only morally untenable; it is in the long run self-defeating. Until gender bias is confronted, there can be no sustainable development."

Women, the Environment and Sustainable Development. Rosa Braidotti, Ewa Charkiewicz, Sabine Hausler and Saskia Wieringa. Zed Books and INSTRAW, 1993. 224 pp.

While the notion of sustainable development is supposed to address adequately its environmental dimensions, there is still no agreed theoretical framework relating women to this new perspective. This book seeks to provide that, and to address the policy implications raised by so doing.

After a comprehensive review of the current perspectives used in thinking about women, environment and development, the authors put forward the basic elements they consider necessary for constructing an alternative framework that emphasizes such values as diversity of solutions, environmental sustainability, women's autonomy, local self-reliance, and peace.

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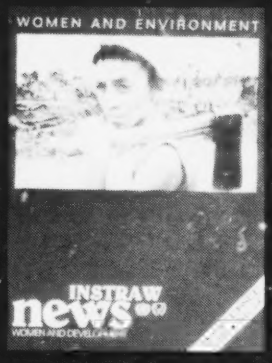

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